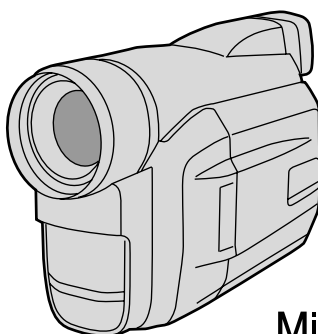


# JVC

## SERVICE MANUAL

### DIGITAL VIDEO CAMERA

## GR-DVF11U/DVF21U/DVF31U



Mini DV NTSC

### SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-DVF31U)*

#### Camcorder

##### General

|                                |                                                                                                                               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Power supply                   | : DC 6.3 V $\overline{\text{---}}$ (Using AC Power Adapter/Charger)<br>DC 7.2 V $\overline{\text{---}}$ (Using battery pack)  |
| Power consumption              |                                                                                                                               |
| LCD monitor off, viewfinder on | : Approx. 4.6 W                                                                                                               |
| LCD monitor on, viewfinder off | : Approx. 5.7 W                                                                                                               |
| Video light                    | : Approx. 3.9 W                                                                                                               |
| Format                         | : DV Format (SD mode)                                                                                                         |
| Signal format                  | : NTSC Standard                                                                                                               |
| Video signal recording format  | : Digital Component Recording                                                                                                 |
| Cassette                       | : Mini DV Cassette                                                                                                            |
| Tape Speed                     | : SP: 18.8 mm/s<br>LP: 12.5 mm/s                                                                                              |
| Maximum recording time         | : SP: 60 min.<br>LP: 90 min. (using M-DV60ME cassette)                                                                        |
| Pickup                         | : 1/4" CCD                                                                                                                    |
| Lens                           | : F 1.6, f = 3.9 to 62.4 mm, 16:1 Power Zoom Lens                                                                             |
| Filter diameter                | : $\phi$ 40.5 mm                                                                                                              |
| LCD monitor                    | : 3.0" diagonally measured, LCD panel/TFT active matrix system                                                                |
| Viewfinder                     | : Electronic viewfinder with 0.55" color LCD                                                                                  |
| Speaker                        | : Monaural                                                                                                                    |
| Operating temperature          | : 0°C to 40°C (32°F to 104°F)                                                                                                 |
| Operating humidity             | : 35% to 80%                                                                                                                  |
| Storage temperature            | : -20°C to 50°C (-4°F to 122°F)                                                                                               |
| Dimensions                     | : 188 (W) x 118 (H) x 88 (D) mm (7-7/16" x 4-11/16" x 3-1/2")<br>(with the LCD monitor closed and the viewfinder pushed down) |
| Weight                         | : Approx. 700 g (1.6 lbs)                                                                                                     |

##### Connectors

|                 |                                                                                       |
|-----------------|---------------------------------------------------------------------------------------|
| S-Video         | : Y: 1 Vp-p, 75 $\Omega$ , analog output<br>C: 0.29 Vp-p, 75 $\Omega$ , analog output |
| ILIP            | : $\phi$ 3.5 mm, 4-pole, mini-head jack (compatible with RC-5325 plug)                |
| PC              | : $\phi$ 2.5 mm, 3-pole                                                               |
| Video output    | : 1 Vp-p, 75 $\Omega$ unbalanced, analog output                                       |
| Audio output    | : -8 dBs, 1 k $\Omega$ analog output, stereo                                          |
| DV input/output | : 4-pin, IEEE1394 compliant                                                           |

#### AC Power Adapter / Charger AA-V20U

|                   |                                                             |
|-------------------|-------------------------------------------------------------|
| Power requirement |                                                             |
| U.S.A. and Canada | : AC 120 V~, 60 Hz                                          |
| Other countries   | : AC 110 V to 240 V~, 50/60 Hz                              |
| Power consumption | : 23 W                                                      |
| Output            |                                                             |
| Charge            | : DC 7.2 V $\overline{\text{---}}$ , 0.77 A                 |
| VTR               | : DC 6.3 V $\overline{\text{---}}$ , 1.8 A                  |
| Dimensions        | : 68 (W) x 38 (H) x 110 (D) mm (2-11/16" x 1-1/2" x 4-3/8") |
| Weight            | : Approx. 255 g (0.57 lbs)                                  |

*Specifications shown are for SP mode unless otherwise indicated. E & O.E. Design and specifications subject to change without notice.*

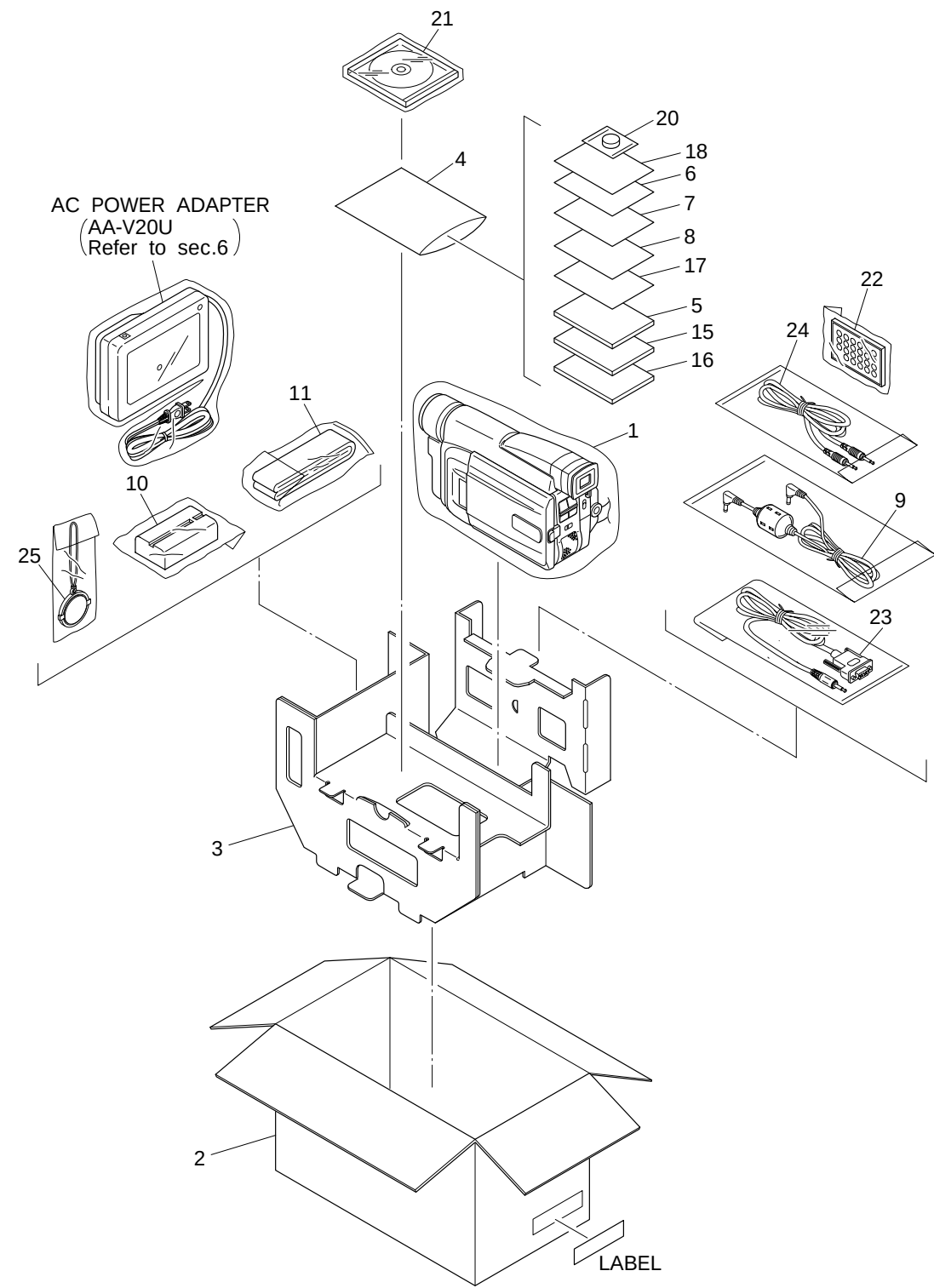
SECTION 5  
PARTS LIST

SAFETY PRECAUTION

Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.

5.1 PACKING ASSEMBLY <M1>

The instruction manual to be provided with this product will differ according to the destination.



| #     | ⚠ REF No. | PART No. | PART NAME, DESCRIPTION |
|-------|-----------|----------|------------------------|
| ***** |           |          |                        |

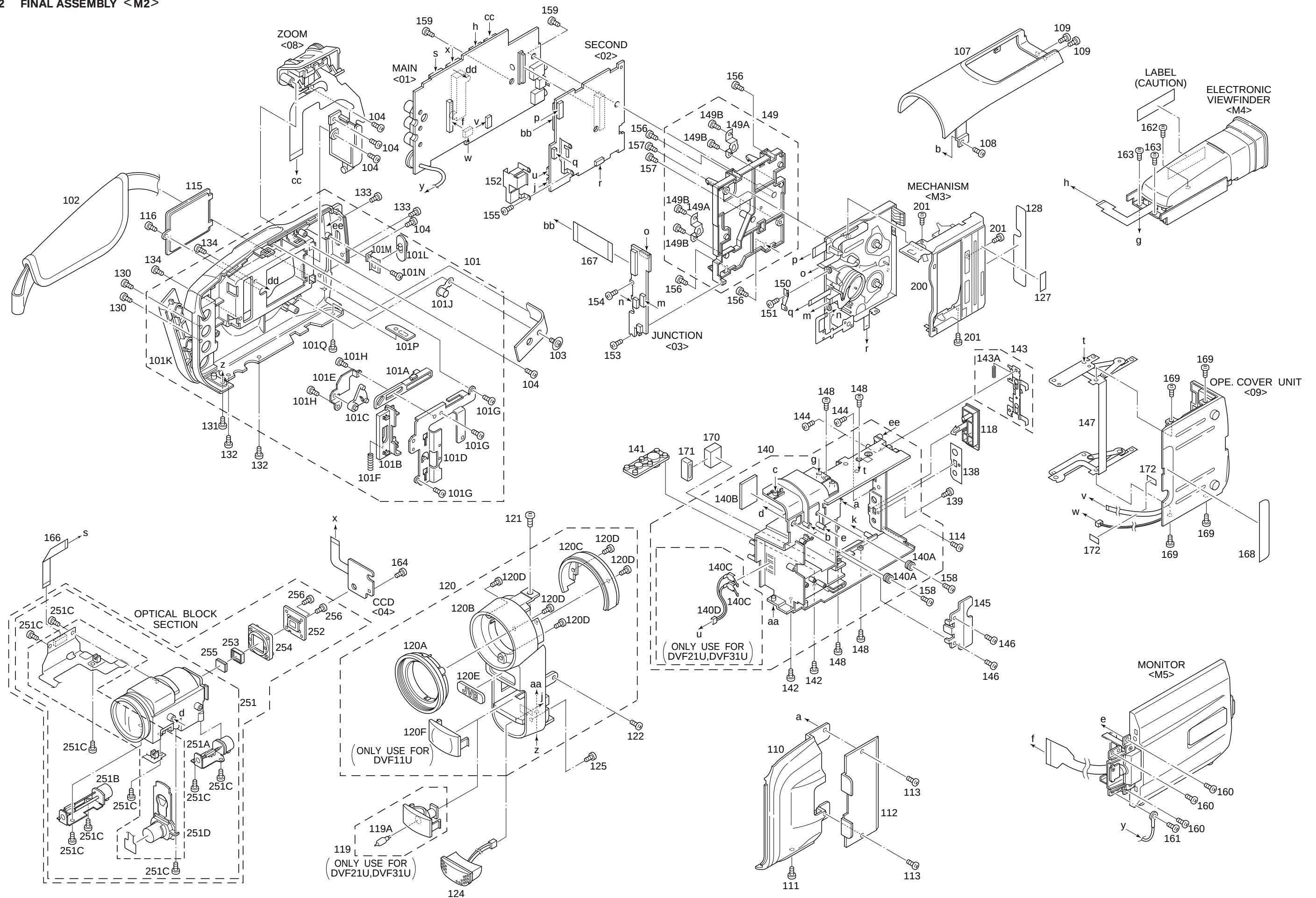
PACKING ASSEMBLY <M1>

|      |               |                            |
|------|---------------|----------------------------|
| 1    | LY30023-015A  | POLY BAG                   |
| 2    | LY31368-001A  | PACKING CASE,C             |
|      | LY31368-002A  | PACKING CASE,B             |
|      | LY31394-001A  | PACKING CASE,A             |
| 3    | LY31369-001A  | CUSHION,A                  |
|      | LY31380-001A  | CUSHION,B,C                |
| 4    | QPA02003006   | POLY BAG                   |
| ⚠ 5  | LYT0420-001A  | INST.BOOK(EN),C            |
| ⚠    | LYT0420-002A  | INST.BOOK(FR),C            |
| ⚠    | LYT0420-003A  | INST.BOOK(SP),C            |
| ⚠    | LYT0421-001A  | INST.BOOK(EN),A,B          |
| ⚠    | LYT0421-002A  | INST.BOOK(FR),A,B          |
| ⚠    | LYT0421-003A  | INST.BOOK(SP),A,B          |
| 6    | YU10350       | Q.CARD(JCA)                |
| 7    | BT-51005-3    | WARRANTY INF.              |
| 8    | BT-51020-2    | REGIST.CARD                |
| 9    | LYH30039-001A | CABLE ASSY,DC CORD         |
| ⚠ 10 | LY31267-002A  | BATT.PACK ASSY             |
| 11   | LY20186-001A  | SHOULDER STRAP             |
| ⚠ 15 | LYT0419-001A  | INST.BOOK(SOFT.SETUP),B,C  |
| ⚠ 16 | LYT0432-002A  | INST.BOOK(SOFT.OPE.EN),B,C |
| 17   | LYT0378-003A  | SHEET(AGREMENT),B,C        |
| 18   | LYT0420-004A  | SHEET (ATT.)               |
| ⚠ 20 | PECA0903      | LI BATTERY,B,C             |
| 21   | LY31133-005D  | CD ROM ASSY,B,C            |
| 22   | YQ20922Q      | REMOTE CONTROLLER,B,C      |
| 23   | QAM0084-001   | PC CABLE,B,C               |
| 24   | PEAC0428-150  | CABLE ASSY, EDITING,B,C    |
| 25   | LY41538-002A  | CAP(HOOD)ASSY              |

- INSTRUCTIONS  
EN ..... ENGLISH  
FR ..... FRENCH  
SP ..... SPANISH

| MODEL     | MARK |
|-----------|------|
| GR-DVF11U | A    |
| GR-DVF21U | B    |
| GR-DVF31U | C    |

## 5.2 FINAL ASSEMBLY <M2>

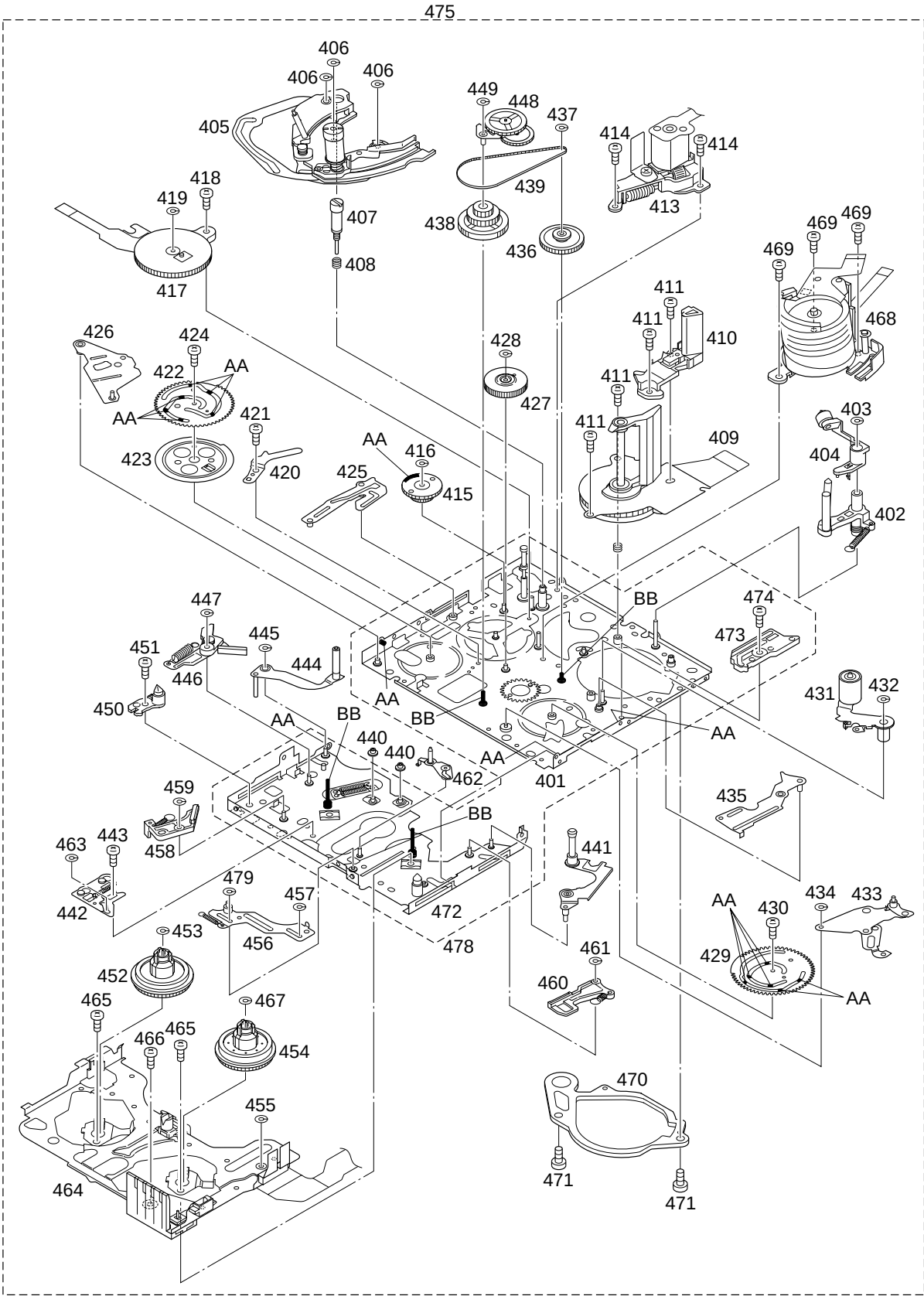


| #                                | △ | REF No. | PART No.     | PART NAME, DESCRIPTION | #                                | △ | REF No. | PART No.      | PART NAME, DESCRIPTION               |
|----------------------------------|---|---------|--------------|------------------------|----------------------------------|---|---------|---------------|--------------------------------------|
| *****                            |   |         |              |                        | 140A                             |   |         | LY41082-001A  | CUSHION(OP),X2                       |
| <b>FINAL ASSEMBLY &lt;M2&gt;</b> |   |         |              |                        | 140B                             |   |         | LY30016-0H2A  | SPACER-A                             |
| △                                |   | 101     | LY10173-001A | LOWER CASE ASSY        | 140C                             |   |         | YQ43810-1-1   | CONTACT(LIGHT),X2 B,C                |
|                                  |   | 101A    | LY31214-001A | KNOB(B.RELEASE)        | 140D                             |   |         | WJM0003-004A  | E-SI C WIRE C-F,B,C                  |
|                                  |   | 101B    | LY31261-001A | LOCK(B.RELEASE)        | 141                              |   |         | LY31019-001A  | BASE                                 |
|                                  |   | 101C    | LY41545-001A | CAM(B.RELEASE)         | 142                              |   |         | LY30018-084A  | SPECIAL SCREW,X2                     |
|                                  |   | 101D    | LY20473-001A | BKT(B.RELEASE)         | 143                              |   |         | LY41534-001A  | LOCK ASSY                            |
|                                  |   | 101E    | LY31215-001A | HOLD(B.RELEASE)        | 143A                             |   |         | LY30002-015A  | COMPRES.SPRING                       |
|                                  |   | 101F    | LY30002-033A | COMPRES. SPRING        | 144                              |   |         | QYSLSP2035Z   | SCREW,X2                             |
|                                  |   | 101G    | QYSLSF2060Z  | SCREW,X3               | 145                              |   |         | LY31287-001A  | BRACKET(UP)                          |
|                                  |   | 101H    | QYSLSP2030Z  | SCREW,X2               | 146                              |   |         | QYSLSF2055D   | SPECIAL SCREW,X2                     |
|                                  |   | 101J    | LY40081-001A | CAP                    | 147                              |   |         | LY31227-001A  | ARM ASSY                             |
|                                  |   | 101K    | LY31217-001A | CAP(RCA)               | 148                              |   |         | LY30018-042A  | SCREW,X4                             |
|                                  |   | 101L    | LY41530-001A | KNOB(C.DOOR)           | 149                              |   |         | LY31226-001A  | HOLDER(M)ASSY                        |
|                                  |   | 101M    | LY41531-001A | BRACKET(KNOB)          | 149A                             |   |         | LY41085-001B  | BKT(MECHA),X2                        |
|                                  |   | 101N    | QYSLSF2040Z  | SCREW                  | 149B                             |   |         | QYSLSF2040Z   | SCREW,X4                             |
|                                  |   | 101P    | LY41791-001A | BRACKET                | 150                              |   |         | LY40709-001C  | BRACKET(GRD)                         |
|                                  |   | 101Q    | QYSLSP2040D  | SCREW                  | 151                              |   |         | YQ43893-4     | MINI SCREW                           |
|                                  |   | 102     | LY20476-001A | GRIP BELT              | 152                              |   |         | LY31229-001A  | SHIELD CASE                          |
|                                  |   | 103     | LY30018-003A | SPECIAL SCREW          | 153                              |   |         | LY30018-024A  | SCREW                                |
|                                  |   | 104     | QYSLSF2055D  | SPECIAL SCREW,X5       | 154                              |   |         | YQ43893-3     | MINI SCREW                           |
|                                  |   | 107     | LY20461-001A | TOP COVER,C            | 155                              |   |         | YQ43893-3     | MINI SCREW                           |
|                                  |   |         | LY20461-002A | TOP COVER,B            | 156                              |   |         | QYSLSF2055D   | SPECIAL SCREW,X4                     |
|                                  |   |         | LY20461-003A | TOP COVER,A            | 157                              |   |         | LY30019-014A  | SPECIAL SCREW,X2                     |
|                                  |   | 108     | QYSLSF2055D  | SPECIAL SCREW          | 158                              |   |         | LY30018-050A  | SPECIAL SCREW,X2                     |
|                                  |   | 109     | LY30018-084A | SPECIAL SCREW,X2       | 159                              |   |         | QYSLSF2055D   | SPECIAL SCREW,X2                     |
|                                  |   | 110     | LY10177-001A | UPPER CASE(1)          | 160                              |   |         | QYSLSF2055D   | SPECIAL SCREW,X3                     |
|                                  |   | 111     | QYSLSF2055D  | SPECIAL SCREW          | 161                              |   |         | QYSLSF2055D   | SPECIAL SCREW                        |
|                                  |   | 112     | LY20462-001A | UPPER CASE(2)          | 162                              |   |         | LY30018-089A  | SPECIAL SCREW                        |
|                                  |   | 113     | QYSLSF2055D  | SPECIAL SCREW,X2       | 163                              |   |         | QYSLSF2055D   | SPECIAL SCREW,X2                     |
|                                  |   | 114     | LY30018-084A | SPECIAL SCREW          | 164                              |   |         | QYSLSP2030D   | SCREW                                |
| △                                |   | 115     | LY31219-001A | CAP(JIG CONN)          | 166                              |   |         | WJT0011-002A  | E-CARD WIRE,OP-MAIN CN107            |
|                                  |   | 116     | QYSLSP2030D  | SCREW                  | 167                              |   |         | QUQ105-35X3AA | FFC WIRE,SECOND CN401-JUNCTION CN501 |
|                                  |   | 118     | LY31218-001A | CAP(REAR JACK)         | 168                              |   |         | LY41672-001A  | SHEET                                |
|                                  |   | 119     | LY30860-001B | DC LIGHT ASSY,B,C      | 169                              |   |         | LY30018-008A  | SPECIAL SCREW,X4                     |
|                                  |   | 119A    | YQ44266      | LAMP,B,C               | 170                              |   |         | LY41823-001A  | SPACER (FCC)                         |
| △                                |   | 120     | LY10178-001A | FRONT COVER ASSY,B,C   | 171                              |   |         | QQR0717-002   | FERRITE CORE                         |
|                                  |   |         | LY10178-002A | FRONT COVER ASSY,A     | 172                              |   |         | LY30016-0Y5A  | SPACER-A,X2                          |
|                                  |   | 120A    | LY31220-001A | HOOD(1)                | 200                              |   |         | LY30483-003B  | CASSETTE HOUSING ASSY                |
|                                  |   | 120B    | LY31221-001A | HOOD(2)                | 201                              |   |         | YQ43893-4     | MINI SCREW,X3                        |
|                                  |   | 120C    | LY31222-001A | HOOD(3)                | <b>- OPTICAL BLOCK SECTION -</b> |   |         |               |                                      |
|                                  |   | 120D    | QYSLSF2060Z  | SCREW,X5               | 251                              |   |         | LY30948-003A  | OP BLOCK ASSY                        |
|                                  |   | 120E    | LY41381-001A | MARK                   | 251A                             |   |         | PTY30948-002  | FOCUS MOTOR                          |
|                                  |   | 120F    | LY30934-007A | COVER(LIGHT),A         | 251B                             |   |         | PTY30948-301  | ZOOM MOTOR                           |
|                                  |   | 121     | YQ43762-5    | SPECIAL SCREW          | 251C                             |   |         | PTY30151-016  | SCREW,X9                             |
|                                  |   | 122     | QYSLSF2055D  | SPECIAL SCREW          | 251D                             |   |         | PTY30948-006  | IRIS MOTOR UNIT,INCL.FPC             |
|                                  |   | 124     | LY30861-006A | MICROPHONE             | 252                              |   |         | LYH40003-001A | CCD BASE ASSY                        |
|                                  |   | 125     | QYSLSF2055D  | SPECIAL SCREW          | 253                              |   |         | LY31370-001A  | SPACER RUBBER                        |
|                                  |   | 127     | LY40699-002A | LABEL(PUSH)            | 254                              |   |         | LY20497-001A  | CCD SPACER                           |
|                                  |   | 128     | LY40698-002A | LABEL(HOUSING)         | 255                              |   |         | LY41718-001A  | OPTICAL LPF                          |
|                                  |   | 130     | QYSLSF2090D  | SCREW,X2               | 256                              |   |         | QYSPSGU2080Z  | SCREW,X2                             |
|                                  |   | 131     | QYSLSF2055D  | SPECIAL SCREW          |                                  |   |         |               |                                      |
|                                  |   | 132     | LY30018-084A | SPECIAL SCREW,X2       |                                  |   |         |               |                                      |
|                                  |   | 133     | QYSLSF2055D  | SPECIAL SCREW,X2       |                                  |   |         |               |                                      |
|                                  |   | 134     | QYSLSF2055D  | SPECIAL SCREW,X2       |                                  |   |         |               |                                      |
|                                  |   | 138     | LY41609-001A | PLATE,B,C              |                                  |   |         |               |                                      |
|                                  |   |         | LY41609-002A | PLATE,A                |                                  |   |         |               |                                      |
|                                  |   | 139     | LY30018-044A | SCREW                  |                                  |   |         |               |                                      |
| △                                |   | 140     | LY10180-001A | FRAME ASSY,B,C         |                                  |   |         |               |                                      |
| △                                |   |         | LY10180-002A | FRAME ASSY,A           |                                  |   |         |               |                                      |



5.3 MECHANISM ASSEMBLY <M3>

**BEWARE OF BOGUS PARTS**  
*Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.*



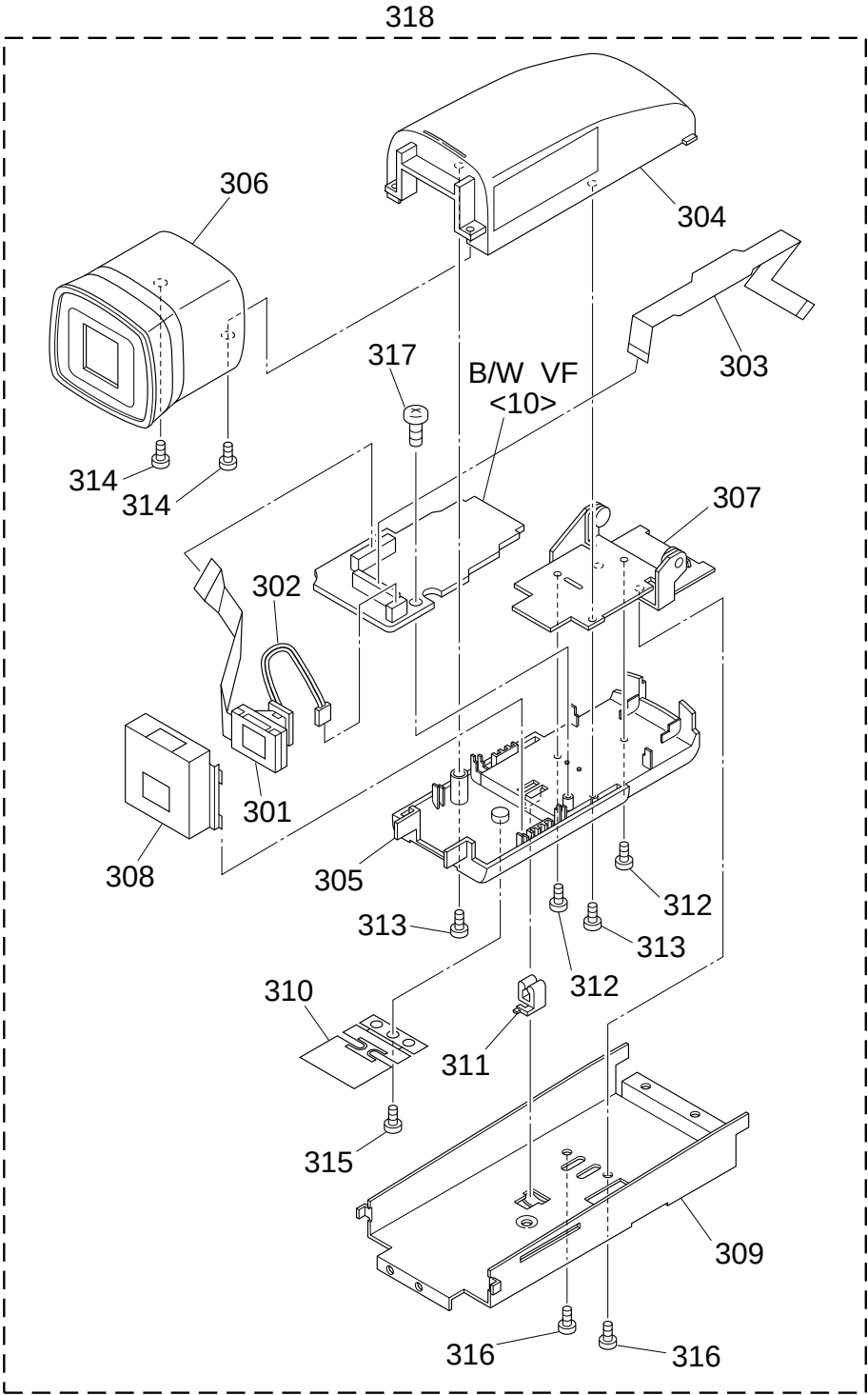
| Classification | Part No.   | Symbol in drawing |
|----------------|------------|-------------------|
| Grease         | KYODO-SH-P | AA                |
| Oil            | YTU94027   | BB                |

**NOTE:** The section marked in AA and BB indicate lubrication and greasing areas.

| #                                    | △ REF No. | PART No.     | PART NAME, DESCRIPTION |
|--------------------------------------|-----------|--------------|------------------------|
| *****                                |           |              |                        |
| <b>MECHANISM ASSEMBLY &lt;M3&gt;</b> |           |              |                        |
| 401                                  |           | LY10077-001J | MAIN DECK ASSY         |
| 402                                  |           | LY30436-001G | SLANT POLE ARM ASSY    |
| 403                                  |           | YQ44246      | SLIT WASHER            |
| 404                                  |           | LY30438-001B | CLEANER ARM ASSY       |
| 405                                  |           | LY10080-001P | RAIL ASSY              |
| 406                                  |           | YQ44246      | SLIT WASHER,X3         |
| 407                                  |           | LY40353-001D | GUIDE ROLLER(S)ASSY    |
| 408                                  |           | LY30002-006C | COMPRES. SPRING        |
| 409                                  |           | QAR0026-001  | CAPSTAN MOTOR          |
| 410                                  |           | LY30504-001C | CATCHER(T)ASSY         |
| 411                                  |           | YQ43893      | MINI SCREW,X4          |
| 413                                  |           | LY30448-001C | MOTOR BKT ASSY         |
| 414                                  |           | YQ43893      | MINI SCREW,X2          |
| 415                                  |           | LY30449-001C | WORM WHEEL             |
| 416                                  |           | YQ44246      | SLIT WASHER            |
| 417                                  |           | LY40496-001C | ROTARY ENCODER         |
| 418                                  |           | YQ43893      | MINI SCREW             |
| 419                                  |           | YQ44246      | SLIT WASHER            |
| 420                                  |           | LY40614-001B | GEAR HOLDER            |
| 421                                  |           | YQ43893      | MINI SCREW             |
| 422                                  |           | LY30450-001C | MAIN CAM               |
| 423                                  |           | LY30840-001A | BRAKE CTL PLATE        |
| 424                                  |           | YQ43893      | MINI SCREW             |
| 425                                  |           | LY40373-001C | TC LEVER ASSY          |
| 426                                  |           | LY30452-001E | SLIDE LEVER ASSY       |
| 427                                  |           | LY30454-001A | CONNECT GEAR           |
| 428                                  |           | YQ44246      | SLIT WASHER            |
| 429                                  |           | LY30455-001B | SUB CAM                |
| 430                                  |           | YQ43893      | MINI SCREW             |
| 431                                  |           | LY30456-001B | PINCHROLLER ARM ASSY   |
| 432                                  |           | YQ44246      | SLIT WASHER            |
| 433                                  |           | LY30459-001A | CHARGE ARM ASSY        |
| 434                                  |           | YQ44246      | SLIT WASHER            |
| 435                                  |           | LY40387-001B | BC LEVER ASSY          |
| 436                                  |           | LY40389-001D | R.D.PULLEY ASSY        |
| 437                                  |           | YQ44246-2    | SLIT WASHER            |
| 438                                  |           | LY40391-001E | CENTER GEAR ASSY       |
| 439                                  |           | LY40396-001A | TIMING BELT            |
| 440                                  |           | LY40413-001A | COLLAR,X2              |
| 441                                  |           | LY30468-001C | GUIDE ARM ASSY         |
| 442                                  |           | LY30618-001C | SLIDE GUIDE PLATE ASSY |
| 443                                  |           | YQ43893-2    | MINI SCREW             |
| 444                                  |           | LY40420-001J | TENSION ARM ASSY       |
| 445                                  |           | YQ44246      | SLIT WASHER            |
| 446                                  |           | LY30471-001D | PAD ARM ASSY           |
| 447                                  |           | YQ44246      | SLIT WASHER            |
| 448                                  |           | LY40432-001E | IDLER ARM ASSY         |
| 449                                  |           | YQ44246-2    | SLIT WASHER            |
| 450                                  |           | LY30476-001A | GUIDE PIN(SUPPLY)      |
| 451                                  |           | YQ43893      | MINI SCREW             |
| 452                                  |           | LY40441-001B | REEL DISK(SUPPLY)ASSY  |
| 453                                  |           | YQ44246      | SLIT WASHER            |
| 454                                  |           | LY40443-001B | REEL DISK(TAKE-UP)ASSY |
| 455                                  |           | YQ44246      | SLIT WASHER            |
| 456                                  |           | LY30477-001D | CTL PLATE ASSY         |
| 457                                  |           | YQ44246      | SLIT WASHER            |
| 458                                  |           | LY40444-001E | LOADING BRAKE ASSY     |
| 459                                  |           | YQ44246      | SLIT WASHER            |

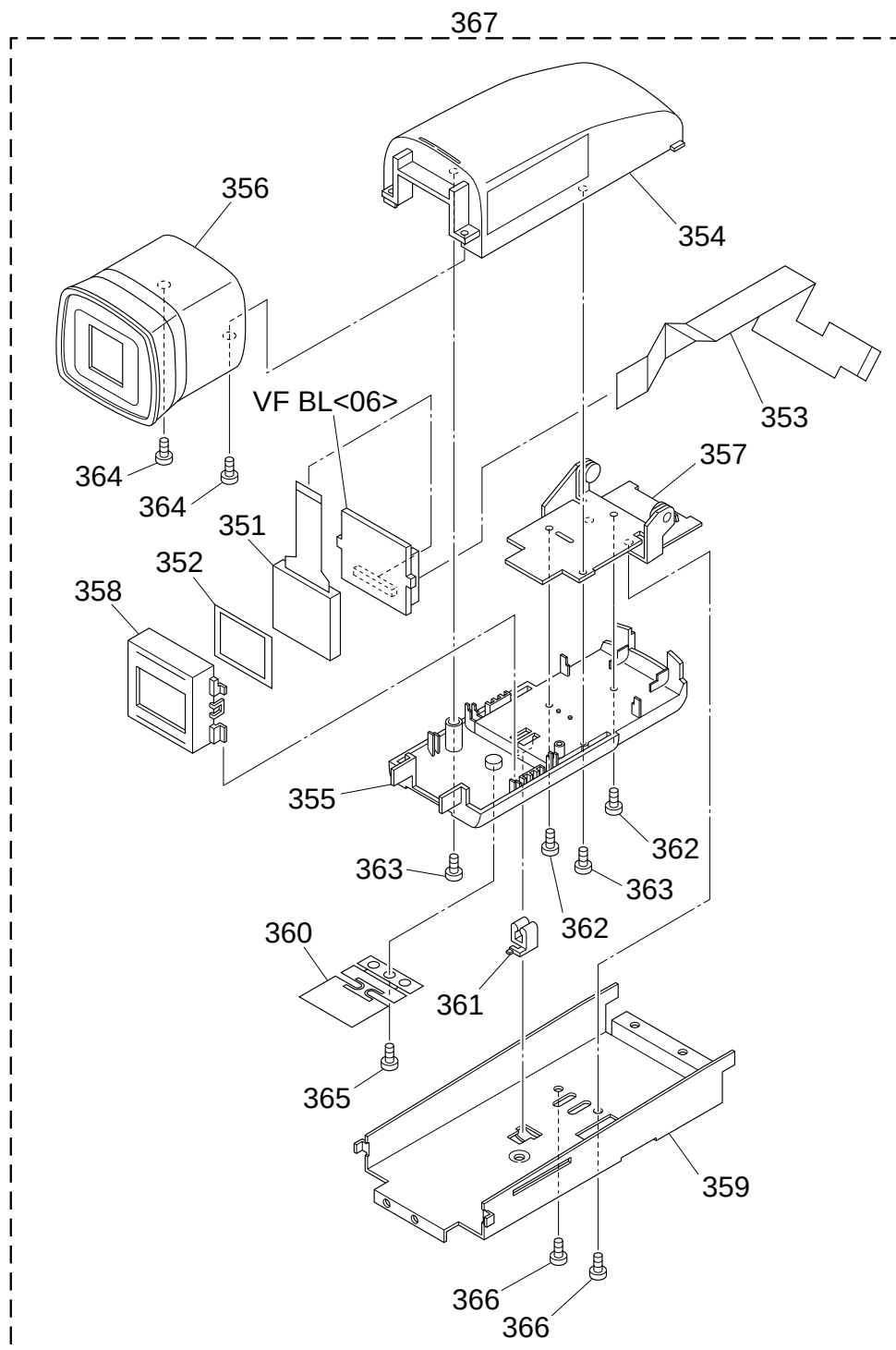
| #   | △ REF No. | PART No.     | PART NAME, DESCRIPTION |
|-----|-----------|--------------|------------------------|
| 460 |           | LY40452-001A | SUB BRAKE ASSY         |
| 461 |           | YQ44246      | SLIT WASHER            |
| 462 |           | LY30479-001B | RELEASE GUIDE ASSY     |
| 463 |           | YQ44246      | SLIT WASHER            |
| 464 |           | LY20146-001G | REEL COVER ASSY        |
| 465 |           | YQ43893-4    | MINI SCREW,X2          |
| 466 |           | YQ43893      | MINI SCREW             |
| 467 |           | YQ44246      | SLIT WASHER            |
| 468 |           | YDV2086I     | DRUM ASSY              |
| 469 |           | YQ43893      | MINI SCREW,X3          |
| 470 |           | LY20138-001C | PWB HOLDER             |
| 471 |           | YQ43893      | MINI SCREW,X2          |
| 472 |           | LY10082-001H | SLIDE DECK ASSY        |
| 473 |           | LY30462-001A | LOADING GUIDE          |
| 474 |           | YQ43893      | MINI SCREW             |
| 475 |           | YMA0025F     | MECHA(A)ASSY           |
| 478 |           | LY30496-001N | DECK ASSY              |
| 479 |           | LY41674-001A | SLIT WASHER            |

5.4 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-DVF11U/DVF21U]



| #                                  | △ REF No. | PART No.     | PART NAME, DESCRIPTION | #     | △ REF No. | PART No.      | PART NAME, DESCRIPTION |
|------------------------------------|-----------|--------------|------------------------|-------|-----------|---------------|------------------------|
| *****                              |           |              |                        | 308   |           | LY20481-001A  | HOLDER(B/W LCD)        |
| ELECTRONIC VIEWFINDER ASSEMBLY<M4> |           |              |                        | 309   |           | LY31232-001A  | BRACKET(VF)            |
|                                    |           |              |                        | 310   |           | LY31250-001A  | CAP                    |
|                                    |           |              |                        | 311   |           | LY40692-002A  | CLIP(MONITOR)          |
|                                    |           |              |                        | 312   |           | LY30018-038A  | SPECIAL SCREW,X2       |
| 301                                |           | QLD0097-001  | LCD MODULE             | 313   |           | LY30018-079A  | SPECIAL SCREW,X2       |
| 302                                |           | QLL0067-001  | BACK LIGHT             | 314   |           | LY30018-079A  | SPECIAL SCREW,X2       |
| 303                                |           | QAL0198-002  | FPC                    | 315   |           | LY30018-063A  | SPECIAL SCREW          |
| △ 304                              |           | LY31265-001A | VF CASE(UPPER)ASSY     | 316   |           | LY41599-001A  | SPECIAL SCREW,X2       |
| △ 305                              |           | LY20464-001A | VF CASE(LOWER)         | 317   |           | LY30018-023A  | SPECIAL SCREW          |
| 306                                |           | LY20465-002A | EYE P.ASSY             | △ 318 |           | LYH20094-001A | EVF ASSY               |
| 307                                |           | LY31230-001A | HINGE(VF)ASSY          |       |           |               |                        |

## 5.4 ELECTRONIC VIEWFINDER ASSEMBLY <M4> [GR-DVF31U]



| # | △ REF No. | PART No. | PART NAME, DESCRIPTION |
|---|-----------|----------|------------------------|
|---|-----------|----------|------------------------|

\*\*\*\*\*

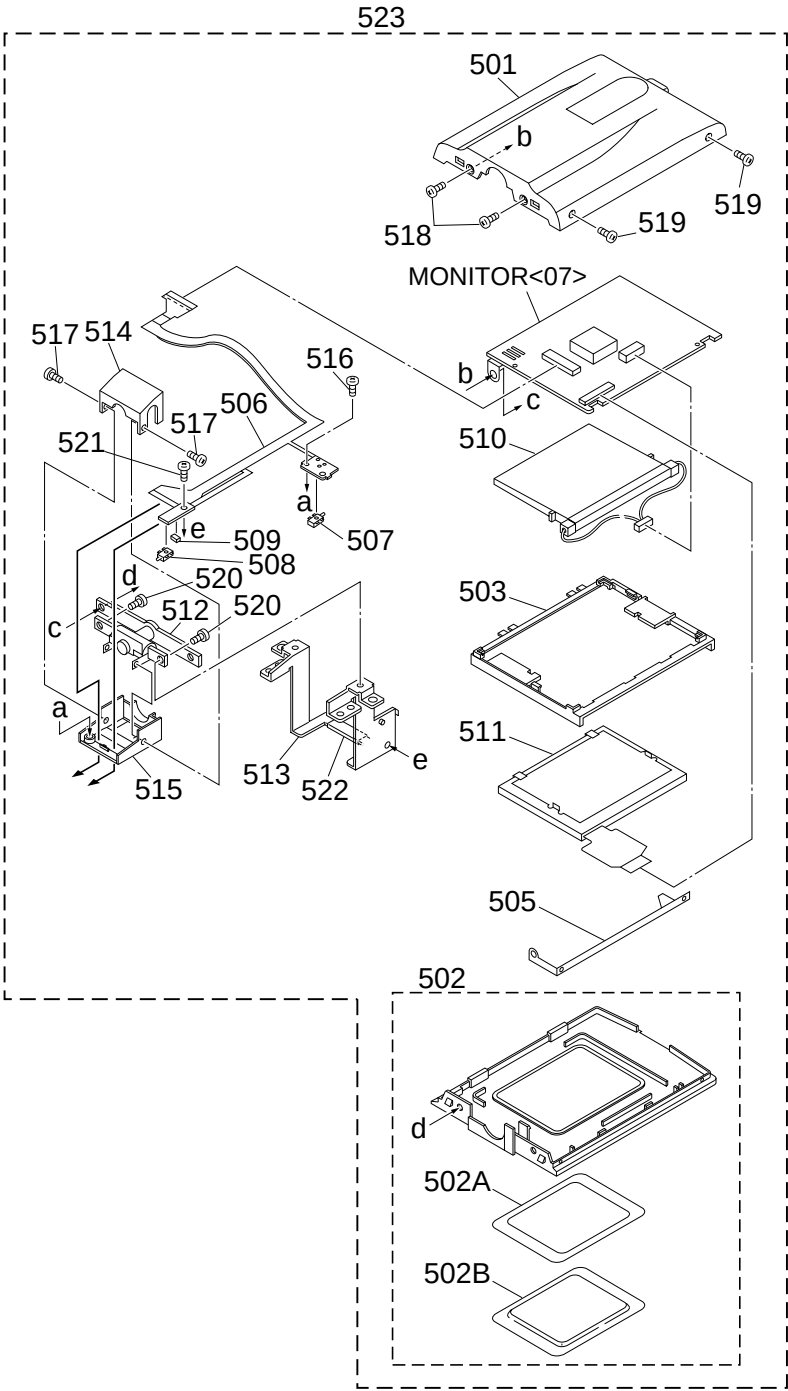
### ELECTRONIC VIEWFINDER ASSEMBLY <M4>

|   |     |              |                    |
|---|-----|--------------|--------------------|
|   | 351 | QLD0056-001  | LCD MODULE         |
|   | 352 | LY40127-001A | SPACER(LCD.)       |
|   | 353 | QAL0197-002  | FPC                |
| △ | 354 | LY31265-001A | VF CASE(UPPER)ASSY |
| △ | 355 | LY20464-001A | VF CASE(LOWER)     |
|   | 356 | LY20465-001A | EYE P.ASSY         |
|   | 357 | LY31230-001A | HINGE(VF)ASSY      |

| # | △ REF No. | PART No. | PART NAME, DESCRIPTION |
|---|-----------|----------|------------------------|
|---|-----------|----------|------------------------|

|   |     |               |                  |
|---|-----|---------------|------------------|
|   | 358 | LY20466-001A  | HOLDER(LCD)      |
|   | 359 | LY31232-001A  | BRACKET(VF)      |
|   | 360 | LY31250-001A  | CAP              |
|   | 361 | LY40692-002A  | CLIP(MONITOR)    |
|   | 362 | LY30018-038A  | SPECIAL SCREW,X2 |
|   | 363 | LY30018-079A  | SPECIAL SCREW,X2 |
|   | 364 | LY30018-079A  | SPECIAL SCREW,X2 |
|   | 365 | LY30018-063A  | SPECIAL SCREW    |
|   | 366 | LY41599-001A  | SPECIAL SCREW,X2 |
| △ | 367 | LYH20094-002A | EVF ASSY         |

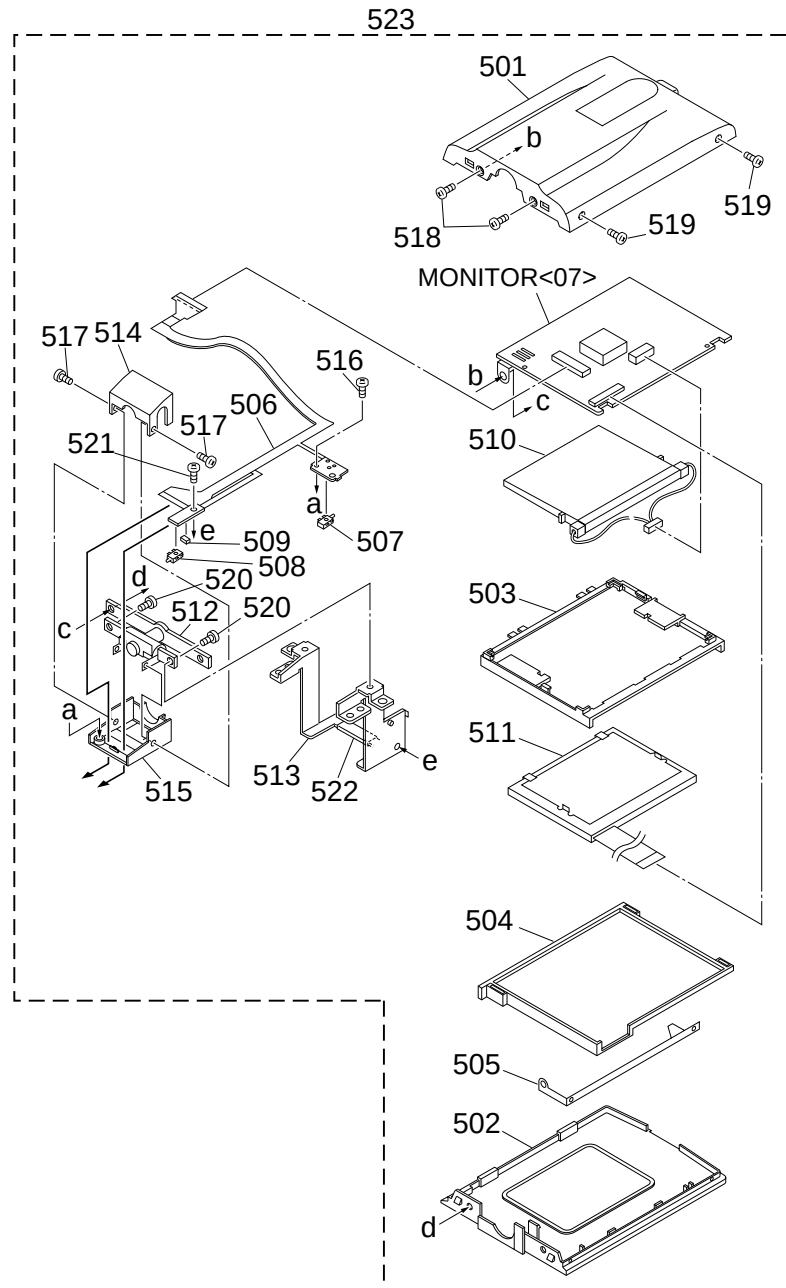
5.5 MONITOR ASSEMBLY <M5> [GR-DVF11U/DVF21U]



| #                     | △    | REF No. | PART No.     | PART NAME, DESCRIPTION | # | △   | REF No. | PART No.      | PART NAME, DESCRIPTION |
|-----------------------|------|---------|--------------|------------------------|---|-----|---------|---------------|------------------------|
| *****                 |      |         |              |                        |   |     |         |               |                        |
| MONITOR ASSEMBLY <M5> |      |         |              |                        |   |     |         |               |                        |
| △                     | 501  |         | LY20467-001A | M.COVER ASSY           |   | 510 |         | QLL0066-001   | BACK LIGHT             |
|                       | 502  |         | LY20475-001A | M.CASE(2.5)ASSY        |   | 511 |         | QLD0082-001   | LCD MODULE             |
|                       | 502A |         | LY41539-001A | SHEET                  |   | 512 |         | LY31236-001A  | HINGE ASSY             |
|                       | 502B |         | LY31290-001A | WINDOW(2.5)            |   | 513 |         | LY31237-001A  | BRACKET                |
|                       | 503  |         | LY20474-001A | HOLDER(PWB2.5)         |   | 514 |         | LY31238-001A  | HINGE COVER(1)         |
|                       | 505  |         | LY31235-001A | BRACKET(EARTH)         |   | 515 |         | LY31239-001A  | HINGE COVER(2)         |
|                       | 506  |         | QAL0199-002  | FPC                    |   | 516 |         | QYSPSGT1735Z  | SCREW                  |
|                       | 507  |         | NSW0007-001X | DETECT SWITCH          |   | 517 |         | LY30018-058A  | SPECIAL SCREW,X2       |
|                       | 508  |         | NSW0122-001X | DETECT SWITCH          |   | 518 |         | QYSLSP2040D   | SCREW,X2               |
|                       | 509  |         | NDC11HJ-180X | CAPACITOR              |   | 519 |         | QYSPSPT1750D  | SCREW,X2               |
|                       |      |         |              |                        |   | 520 |         | LY30018-090A  | SPECIAL SCREW,X2       |
|                       |      |         |              |                        |   | 521 |         | LY30018-038A  | SPECIAL SCREW          |
|                       |      |         |              |                        |   | 522 |         | LY30016-0V9A  | SPACER-A               |
|                       |      |         |              |                        | △ | 523 |         | LYH20093-001A | MONITOR ASSY           |



## 5.5 MONITOR ASSEMBLY <M5> [GR-DVF31U]



# ▲ REF No. PART No. PART NAME, DESCRIPTION

\*\*\*\*\*

### MONITOR ASSEMBLY <M5>

|       |              |                 |
|-------|--------------|-----------------|
| ▲ 501 | LY20467-001A | M.COVER ASSY    |
| 502   | LY10184-002A | MONITOR CASE    |
| 503   | LY20474-001A | HOLDER (PWB2.5) |
| 504   | LY20484-001A | HOLDER(LCD)     |
| 505   | LY31235-001A | BRACKET(EARTH)  |
| 506   | QAL0199-002  | FPC             |
| 507   | NSW0007-001X | DETECT SWITCH   |
| 508   | NSW0122-001X | DETECT SWITCH   |
| 509   | NDC11HJ-180X | CAPACITOR       |
| 510   | QLL0065-001  | BACK LIGHT      |

# ▲ REF No. PART No. PART NAME, DESCRIPTION

|       |               |                  |
|-------|---------------|------------------|
| 511   | QLD0047-001   | LCD MODULE       |
| 512   | LY31236-001A  | HINGE ASSY       |
| 513   | LY31237-001A  | BRACKET          |
| 514   | LY31238-001A  | HINGE COVER(1)   |
| 515   | LY31239-001A  | HINGE COVER(2)   |
| 516   | QYSPSGT1735Z  | SCREW            |
| 517   | LY30018-058A  | SPECIAL SCREW,X2 |
| 518   | QYSLSP2040D   | SCREW,X2         |
| 519   | QYSPSPT1750D  | SCREW,X2         |
| 520   | LY30018-090A  | SPECIAL SCREW,X2 |
| 521   | LY30018-038A  | SPECIAL SCREW    |
| 522   | LY30016-0V9A  | SPACER-A         |
| ▲ 523 | LYH20093-002A | MONITOR ASSY     |

## 5.6 ELECTRICAL PARTS LIST

| MODEL     | MARK |
|-----------|------|
| GR-DVF11U | A    |
| GR-DVF21U | B    |
| GR-DVF31U | C    |

| #                                     | △ REF No. | PART No.           | PART NAME, DESCRIPTION |
|---------------------------------------|-----------|--------------------|------------------------|
| *****                                 |           |                    |                        |
| <b>MAIN BOARD ASSEMBLY &lt;01&gt;</b> |           |                    |                        |
| PW                                    |           | YB10260A-01        | MAIN BOARD ASSY,A      |
|                                       |           | YB10260B-01        | MAIN BOARD ASSY,B      |
|                                       |           | YB10260C-01        | MAIN BOARD ASSY,C      |
| IC501                                 |           | MAX3221CAE         | IC,B,C                 |
| IC502                                 |           | TC7S08FU           | IC(DIGITAL),B,C        |
| IC503                                 |           | TC7W00FU           | IC(DIGITAL),B,C        |
| IC1001                                |           | MN102F1617HL-D1    | IC(μ C ROM)            |
|                                       |           | or MN1021617FK     | IC(μ C ROM)            |
| IC1002                                |           | UPD6466GS-535-X    | IC(μ C ROM)            |
| IC1003                                |           | NM25C160LZEM8      | IC                     |
|                                       |           | or AT25080N-10SC-X | IC                     |
| IC1004                                |           | RS5C314            | IC                     |
| IC1005                                |           | PIC-26043S         | IR DETECT UNIT         |
| IC1006                                |           | TC7W00FU           | IC(DIGITAL)            |
| IC1007                                |           | TC7W32FK           | IC                     |
| IC1008                                |           | TC7W08FU           | IC(DIGITAL)            |
| IC1009                                |           | S-81330HG-KB-X     | IC                     |
| IC1010                                |           | IC-PST9323U-X      | IC                     |
| IC1011                                |           | BA10358F-XE        | IC                     |
| IC1401                                |           | YQ44824A           | CSP IC ASSY            |
| IC1402                                |           | TC7W14FU           | IC(DIGITAL)            |
| IC1404                                |           | TC74HC4066AFT      | IC(DIGITAL)            |
| IC1405                                |           | TC4W66FU           | IC(DIGITAL)            |
| IC3001                                |           | JCY0106-2          | IC                     |
| IC3002                                |           | M51V18165D50TSK    | IC(DIGITAL)            |
| IC3004                                |           | TK11218BMC         | IC                     |
| IC3005                                |           | SN74AHC1G04K       | IC                     |
| IC3007                                |           | TC7SL00FU          | IC(DIGITAL)            |
| IC3101                                |           | PDI1394P11ABD      | IC                     |
| IC3201                                |           | JCY0107QP          | IC                     |
| IC3203                                |           | TLC2940IPW         | IC                     |
| IC3301                                |           | JCY0108            | IC                     |
| IC3401                                |           | MB88345PF          | IC                     |
| IC3701                                |           | NJM2538V           | IC                     |
| IC3703                                |           | S-81235SG-QI-X     | IC                     |
| IC4301                                |           | JCY0113            | IC                     |
| IC4302                                |           | MSM548331TA        | IC(DIGITAL)            |
| IC4801                                |           | BA10324AF-XE       | IC                     |
| IC4802                                |           | UPC358G2/5/-W      | IC                     |
| IC4851                                |           | UPD16835G3         | IC                     |
| IC5501                                |           | JCY0117            | IC                     |
| IC5601                                |           | HD49323AF          | IC                     |
| IC5602                                |           | MM1385HN           | IC                     |
| IC6001                                |           | FA3675F            | IC                     |
| IC6301                                |           | S-80842ANNP-W      | IC                     |
| IC7801                                |           | TC7SET02FU         | IC(DIGITAL),C          |
| IC7802                                |           | TC7SET08FU         | IC(DIGITAL),C          |
| IC7803                                |           | MM1385BN           | IC                     |
| IC7804                                |           | NJM2535V           | IC,A,B                 |
| Q501                                  |           | 2SC4617/QR/-X      | TRANSISTOR,B,C         |
| Q502                                  |           | 2SC4617/QR/-X      | TRANSISTOR,B,C         |
| Q1001                                 |           | DTC143XE           | TRANSISTOR             |
| Q1002                                 |           | DTA144EE           | TRANSISTOR             |
| Q1005                                 |           | ST-305R4           | PHOTO TRANSISTOR       |
|                                       |           | or RPM-22PB        | PHOTO TRANSISTOR       |
| Q1401                                 |           | DTA114EE           | TRANSISTOR             |
| Q1402                                 |           | DTC114EE           | TRANSISTOR             |

| # | △ REF No. | PART No.         | PART NAME, DESCRIPTION |
|---|-----------|------------------|------------------------|
|   | Q1403     | DTC114EE         | TRANSISTOR             |
|   | Q1404     | DTA114EE         | TRANSISTOR             |
|   | Q1405     | DTA114EE         | TRANSISTOR             |
|   | Q3701     | DTC144EE         | TRANSISTOR             |
|   | Q4301     | 2SA1832/YG/-X    | TRANSISTOR             |
|   | Q4302     | 2SA1832/YG/-X    | TRANSISTOR             |
|   | Q4303     | 2SC4738/YG/-X    | TRANSISTOR             |
|   | Q4304     | 2SA1832/YG/-X    | TRANSISTOR             |
|   | Q4305     | 2SA1832/YG/-X    | TRANSISTOR             |
|   | Q4306     | 2SA1832/YG/-X    | TRANSISTOR             |
|   | Q4307     | 2SA1832/YG/-X    | TRANSISTOR             |
|   | Q4308     | 2SA1832/YG/-X    | TRANSISTOR             |
|   | Q4309     | 2SA1832/YG/-X    | TRANSISTOR             |
|   | Q4310     | DTC143ZE         | TRANSISTOR             |
|   | Q4801     | 2SC4617/QRS/-X   | TRANSISTOR             |
|   | Q4851     | 2SC4617/RS/-X    | TRANSISTOR             |
|   | Q6101     | CPH3304          | MOS FET                |
|   | Q6111     | CPH3304          | MOS FET                |
|   | Q6112     | 2SB1121/ST/-X    | TRANSISTOR             |
|   |           | or 2SB1188(QR)   | TRANSISTOR             |
|   | Q6113     | 2SC4617/QR/-X    | TRANSISTOR             |
|   |           | or 2SC4738/YG/-X | TRANSISTOR             |
|   | Q6121     | CPH3304          | MOS FET                |
|   | Q6131     | CPH3304          | MOS FET                |
|   | Q6141     | CPH3304          | MOS FET                |
|   | Q6142     | 2SA1774/QR/-X    | TRANSISTOR             |
|   |           | or 2SA1832/YG/-X | TRANSISTOR             |
|   | Q6143     | 2SC4617/QR/-X    | TRANSISTOR             |
|   |           | or 2SC4738/YG/-X | TRANSISTOR             |
|   | Q6151     | CPH3304          | MOS FET                |
|   | Q6152     | HN1C01FU/G/-X    | PAIR TRANSISTOR        |
|   | Q6153     | HN1A01FU/G/-X    | PAIR TRANSISTOR        |
|   | Q6154     | 2SA1577/QR/-X    | TRANSISTOR             |
|   | Q6155     | 2SC4617/QR/-X    | TRANSISTOR             |
|   | Q6156     | 2SC4617/QR/-X    | TRANSISTOR,A,B         |
|   |           | or 2SC4738/YG/-X | TRANSISTOR,A,B         |
|   | Q6157     | 2SA1774/QR/-X    | TRANSISTOR             |
|   |           | or 2SA1832/YG/-X | TRANSISTOR             |
|   | Q6158     | DTC144EE         | TRANSISTOR             |
|   |           | or RN1104        | TRANSISTOR             |
|   | Q6201     | 2SA1774/QR/-X    | TRANSISTOR,B,C         |
|   |           | or 2SA1832/YG/-X | TRANSISTOR,B,C         |
|   | Q6202     | 2SD1628/FG/-X    | TRANSISTOR,B,C         |
|   | Q6203     | 2SC4617/QR/-X    | TRANSISTOR,B,C         |
|   |           | or 2SC4738/YG/-X | TRANSISTOR,B,C         |
|   | Q6301     | DTC144EE         | TRANSISTOR             |
|   |           | or RN1104        | TRANSISTOR             |
|   | Q6302     | 2SK1830          | MOS FET                |
|   | Q6303     | 2SJ347           | MOS FET                |
|   | Q6304     | 2SK1830          | MOS FET                |
|   | Q6305     | 2SJ501           | MOS FET                |
|   | Q7801     | UMZ1N            | PAIR TRANSISTOR,C      |
|   | D501      | MA8068           | ZENER DIODE            |
|   | D502      | MA8068           | ZENER DIODE            |
|   | D503      | MA8068           | ZENER DIODE,B,C        |
|   | D504      | MA8068           | ZENER DIODE,B,C        |
|   | D505      | MA8068           | ZENER DIODE,B,C        |
|   | D506      | MA8068           | ZENER DIODE,B,C        |
|   | D507      | 1SS355           | DIODE,B,C              |
|   | D508      | 1SS355           | DIODE,B,C              |
|   | D509      | 1SS355           | DIODE,B,C              |

| # ▲ REF No. | PART No.     | PART NAME, DESCRIPTION |             | # ▲ REF No. | PART No.     | PART NAME, DESCRIPTION |             |
|-------------|--------------|------------------------|-------------|-------------|--------------|------------------------|-------------|
| ▲ D1001     | RB715F       | SB DIODE               |             | R1035       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W |
| D1002       | DAN222       | DIODE                  |             | R1036       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W |
| D3701       | MA8068       | ZENER DIODE            |             | R1037       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| D3702       | MA8068       | ZENER DIODE            |             | R1038       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| D3703       | MA8068       | ZENER DIODE            |             | R1039       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| D5501       | 1SS355       | DIODE                  |             | R1040       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| D6101       | U1FWJ44N     | SB DIODE               |             | R1041       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| D6111       | U1FWJ44N     | SB DIODE               |             | R1042       | NRSA63J-154X | MG RESISTOR            | 150kΩ,1/16W |
| D6121       | U1FWJ44N     | SB DIODE               |             | R1043       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| D6131       | U1FWJ44N     | SB DIODE               |             | R1044       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W |
| D6141       | U1FWJ44N     | SB DIODE               |             | R1045       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W |
| D6142       | 1SS355       | DIODE                  |             | R1047       | NRSA63J-393X | MG RESISTOR            | 39kΩ,1/16W  |
| D6143       | 1SS355       | DIODE                  |             | R1048       | NRSA63J-393X | MG RESISTOR            | 39kΩ,1/16W  |
| D6151       | 1SS357       | SB DIODE               |             | R1049       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| D6152       | 1SS357       | SB DIODE               |             | R1050       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W |
| D6153       | 1SS357       | SB DIODE               |             | R1051       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| D6154       | 1SS357       | SB DIODE               |             | R1052       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| D6155       | MA8091/L/-X  | ZENER DIODE            |             | R1054       | NRSA63J-822X | MG RESISTOR            | 8.2kΩ,1/16W |
| R501        | NRSA63J-0R0X | MG RESISTOR,B,C        | 0Ω,1/16W    | R1055       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  |
| R502        | NRSA63J-0R0X | MG RESISTOR,B,C        | 0Ω,1/16W    | R1056       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  |
| R503        | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  | R1057       | NRSA63J-123X | MG RESISTOR            | 12kΩ,1/16W  |
| R504        | NRSA63J-221X | MG RESISTOR            | 220Ω,1/16W  | R1058       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R505        | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R1062       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R506        | NRSA63J-223X | MG RESISTOR,B,C        | 22kΩ,1/16W  | R1063       | NRSA63J-681X | MG RESISTOR            | 680Ω,1/16W  |
| R507        | NRSA63J-223X | MG RESISTOR,B,C        | 22kΩ,1/16W  | R1064       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R508        | NRSA63J-103X | MG RESISTOR,B,C        | 10kΩ,1/16W  | R1406       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R509        | NRSA63J-103X | MG RESISTOR,B,C        | 10kΩ,1/16W  | R1407       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R510        | N0R0199-004X | FERRITE BEAD           |             | R1408       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  |
| R511        | NRSA63J-0R0X | MG RESISTOR,A          | 0Ω,1/16W    | R1410       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  |
| R512        | NRSA63J-0R0X | MG RESISTOR,A          | 0Ω,1/16W    | R1412       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W |
| R1001       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R1413       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W |
| R1003       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R1414       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1004       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R1415       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| ▲ R1005     | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R1420       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  |
| R1006       | NRVA63D-823X | CMF RESISTOR           | 82kΩ,1/16W  | R1421       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R1007       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R1422       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  |
| R1008       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R1424       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R1009       | NRVA63D-473X | CMF RESISTOR           | 47kΩ,1/16W  | R1427       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W |
| R1010       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R1428       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W |
| R1011       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R1429       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W |
| R1012       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R1430       | NRSA63J-753X | MG RESISTOR            | 75kΩ,1/16W  |
| R1013       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R1431       | NRSA63J-334X | MG RESISTOR            | 330kΩ,1/16W |
| R1014       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R1432       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R1015       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R1433       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1017       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R1434       | NRSA63J-153X | MG RESISTOR            | 15kΩ,1/16W  |
| R1018       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R1435       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1019       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R1438       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1020       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R1439       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1021       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R1444       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1022       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R1445       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1023       | NRSA63J-182X | MG RESISTOR            | 1.8kΩ,1/16W | R1446       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1025       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R1447       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1026       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R1450       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W |
| R1027       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R1451       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W |
| R1028       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   | R1452       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W |
| R1029       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R1453       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W |
| R1030       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R1458       | NRSA63J-683X | MG RESISTOR            | 68kΩ,1/16W  |
| R1031       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   | R1459       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1032       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R1460       | NRSA63J-683X | MG RESISTOR            | 68kΩ,1/16W  |
| R1033       | NRSA63J-393X | MG RESISTOR            | 39kΩ,1/16W  | R1461       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1034       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R1464       | NRSA63J-820X | MG RESISTOR            | 82Ω,1/16W   |

| # △ REF No. | PART No.     | PART NAME, DESCRIPTION |             | # △ REF No. | PART No.     | PART NAME, DESCRIPTION |             |
|-------------|--------------|------------------------|-------------|-------------|--------------|------------------------|-------------|
| R1465       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3312       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1466       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  | R3313       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R1467       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R3315       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W |
| R1468       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R3316       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R1469       | NRSA63J-221X | MG RESISTOR            | 220Ω,1/16W  | R3317       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W |
| R1470       | NRSA63J-221X | MG RESISTOR            | 220Ω,1/16W  | R3318       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R1471       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R3330       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R1472       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R3331       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W |
| R1474       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  | R3332       | NRSA63J-823X | MG RESISTOR            | 82kΩ,1/16W  |
| R1476       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R3333       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| R1477       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3334       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R2151       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  | R3335       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R2152       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  | R3336       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R3002       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   | R3337       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   |
| R3005       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  | R3338       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R3007       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3339       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R3008       | NRSA63J-100X | MG RESISTOR            | 10Ω,1/16W   | R3341       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| R3010       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3342       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R3032       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3343       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R3048       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3344       | NRSA63J-823X | MG RESISTOR            | 82kΩ,1/16W  |
| R3050       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3345       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   |
| R3051       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3346       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W  |
| R3052       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  | R3347       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R3054       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  | R3348       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| R3056       | NRSA63J-471X | MG RESISTOR            | 470Ω,1/16W  | R3349       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| R3057       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  | R3350       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| R3058       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   | R3351       | NRVA63D-121X | CMF RESISTOR           | 120Ω,1/16W  |
| R3059       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  | R3357       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R3060       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   | R3361       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R3061       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3362       | NRSA63J-471X | MG RESISTOR            | 470Ω,1/16W  |
| R3062       | NRSA63J-124X | MG RESISTOR            | 120kΩ,1/16W | R3363       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R3063       | NRSA63J-124X | MG RESISTOR            | 120kΩ,1/16W | R3364       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R3101       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  | R3366       | NRSA63J-562X | MG RESISTOR            | 5.6kΩ,1/16W |
| R3102       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R3367       | NRSA63J-152X | MG RESISTOR            | 1.5kΩ,1/16W |
| R3103       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R3379       | NRSA63J-822X | MG RESISTOR            | 8.2kΩ,1/16W |
| R3105       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R3380       | NRSA63J-822X | MG RESISTOR            | 8.2kΩ,1/16W |
| R3106       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  | R3703       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R3113       | NRSA63J-394X | MG RESISTOR            | 390kΩ,1/16W | R3704       | NRSA63J-224X | MG RESISTOR            | 220kΩ,1/16W |
| R3115       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R3705       | NRSA63J-121X | MG RESISTOR            | 120Ω,1/16W  |
| R3117       | NRSA63J-560X | MG RESISTOR            | 56Ω,1/16W   | R3706       | NRSA63J-225X | MG RESISTOR            | 2.2MΩ,1/16W |
| R3118       | NRSA63J-560X | MG RESISTOR            | 56Ω,1/16W   | R3707       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R3119       | NRSA63J-560X | MG RESISTOR            | 56Ω,1/16W   | R3708       | NRSA63J-121X | MG RESISTOR            | 120Ω,1/16W  |
| R3120       | NRSA63J-560X | MG RESISTOR            | 56Ω,1/16W   | R3712       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R3121       | NRSA63J-512X | MG RESISTOR            | 5.1kΩ,1/16W | R3713       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R3128       | NRSA63J-512X | MG RESISTOR            | 5.1kΩ,1/16W | R3732       | NRSA63J-680X | MG RESISTOR            | 68Ω,1/16W   |
| R3201       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3733       | NRSA63J-680X | MG RESISTOR            | 68Ω,1/16W   |
| R3202       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3734       | NRSA63J-680X | MG RESISTOR            | 68Ω,1/16W   |
| R3211       | NRSA63J-272X | MG RESISTOR            | 2.7kΩ,1/16W | R4302       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R3212       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  | R4304       | NRSA63J-272X | MG RESISTOR            | 2.7kΩ,1/16W |
| R3213       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R4305       | NRSA63J-153X | MG RESISTOR            | 15kΩ,1/16W  |
| R3214       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R4306       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R3215       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R4307       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  |
| R3221       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  | R4308       | NRSA63J-151X | MG RESISTOR            | 150Ω,1/16W  |
| R3224       | NRSA63J-101X | MG RESISTOR            | 100Ω,1/16W  | R4309       | NRVA63D-822X | MG RESISTOR            | 8.2kΩ,1/16W |
| R3233       | NRVA63D-302X | MG RESISTOR            | 3kΩ,1/16W   | R4310       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R3234       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R4311       | NRVA63D-472X | MG RESISTOR            | 4.7kΩ,1/16W |
| R3237       | NRVA63D-622X | MG RESISTOR            | 6.2kΩ,1/16W | R4312       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R3303       | NRSA63J-391X | MG RESISTOR            | 390Ω,1/16W  | R4313       | NRVA63D-562X | MG RESISTOR            | 5.6kΩ,1/16W |
| R3304       | NRSA63J-121X | MG RESISTOR            | 120Ω,1/16W  | R4314       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R3307       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R4315       | NRVA63D-471X | MG RESISTOR            | 470Ω,1/16W  |
| R3308       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R4316       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  |

| #  REF No. | PART No.     | PART NAME, DESCRIPTION |             | #  REF No. | PART No.     | PART NAME, DESCRIPTION |             |
|---------------------------------------------------------------------------------------------|--------------|------------------------|-------------|---------------------------------------------------------------------------------------------|--------------|------------------------|-------------|
| R4317                                                                                       | NRVA63D-471X | MG RESISTOR            | 470Ω,1/16W  | R5507                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4318                                                                                       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  | R5508                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4319                                                                                       | NRVA63D-271X | MG RESISTOR            | 270Ω,1/16W  | R5509                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4320                                                                                       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  | R5510                                                                                       | NRSA63J-220X | MG RESISTOR            | 22Ω,1/16W   |
| R4321                                                                                       | NRVA63D-331X | MG RESISTOR            | 330Ω,1/16W  | R5511                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4322                                                                                       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W  | R5512                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4323                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R5513                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R4324                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R5514                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R4325                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R5515                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R4326                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R5516                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4328                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R5602                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4329                                                                                       | NRSA63J-432X | MG RESISTOR            | 4.3kΩ,1/16W | R5604                                                                                       | NRSA63J-243X | MG RESISTOR            | 24kΩ,1/16W  |
| R4330                                                                                       | NRSA63J-682X | MG RESISTOR            | 6.8kΩ,1/16W | R5605                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4331                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R5606                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   |
| R4332                                                                                       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R5607                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4333                                                                                       | NRSA63J-432X | MG RESISTOR            | 4.3kΩ,1/16W | R6001                                                                                       | NRVA63D-133X | CMF RESISTOR           | 13kΩ,1/16W  |
| R4334                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R6002                                                                                       | NRSA63J-124X | MG RESISTOR            | 120kΩ,1/16W |
| R4335                                                                                       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R6003                                                                                       | NRSA63J-154X | MG RESISTOR            | 150kΩ,1/16W |
| R4336                                                                                       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  | R6004                                                                                       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W |
| R4801                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R6005                                                                                       | NRSA63J-823X | MG RESISTOR            | 82kΩ,1/16W  |
| R4802                                                                                       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   | R6006                                                                                       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| R4804                                                                                       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   | R6007                                                                                       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| R4805                                                                                       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R6008                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    |
| R4806                                                                                       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R6101                                                                                       | NRSA63J-4R7X | MG RESISTOR            | 4.7Ω,1/16W  |
| R4808                                                                                       | NRSA63J-243X | MG RESISTOR            | 24kΩ,1/16W  | R6102                                                                                       | NRVA63D-223X | CMF RESISTOR           | 22kΩ,1/16W  |
| R4809                                                                                       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R6103                                                                                       | NRVA63D-113X | CMF RESISTOR           | 11kΩ,1/16W  |
| R4810                                                                                       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  | R6104                                                                                       | NRSA02J-0R0X | MG RESISTOR            | 0Ω,1/10W    |
| R4811                                                                                       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R6105                                                                                       | NRSA02J-0R0X | MG RESISTOR            | 0Ω,1/10W    |
| R4812                                                                                       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R6111                                                                                       | NRSA63J-4R7X | MG RESISTOR            | 4.7Ω,1/16W  |
| R4813                                                                                       | NRSA63J-391X | MG RESISTOR            | 390Ω,1/16W  | R6112                                                                                       | NRVA63D-183X | CMF RESISTOR           | 18kΩ,1/16W  |
| R4814                                                                                       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R6113                                                                                       | NRVA63D-472X | CMF RESISTOR           | 4.7kΩ,1/16W |
| R4815                                                                                       | NRSA63J-683X | MG RESISTOR            | 68kΩ,1/16W  | R6114                                                                                       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  |
| R4816                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R6115                                                                                       | NRSA63J-152X | MG RESISTOR            | 1.5kΩ,1/16W |
| R4817                                                                                       | NRSA63J-334X | MG RESISTOR            | 330kΩ,1/16W | R6117                                                                                       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R4818                                                                                       | NRSA63J-154X | MG RESISTOR            | 150kΩ,1/16W | R6121                                                                                       | NRSA63J-4R7X | MG RESISTOR            | 4.7Ω,1/16W  |
| R4819                                                                                       | NRSA63J-152X | MG RESISTOR            | 1.5kΩ,1/16W | R6122                                                                                       | NRSA63J-363X | MG RESISTOR            | 36kΩ,1/16W  |
| R4820                                                                                       | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | R6123                                                                                       | NRSA63J-562X | MG RESISTOR            | 5.6kΩ,1/16W |
| R4821                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R6124                                                                                       | NRSA63J-682X | MG RESISTOR            | 6.8kΩ,1/16W |
| R4822                                                                                       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W  | R6125                                                                                       | NRSA63J-133X | MG RESISTOR            | 13kΩ,1/16W  |
| R4823                                                                                       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  | R6126                                                                                       | NRSA63J-363X | MG RESISTOR            | 36kΩ,1/16W  |
| R4824                                                                                       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R6131                                                                                       | NRSA63J-4R7X | MG RESISTOR            | 4.7Ω,1/16W  |
| R4825                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R6132                                                                                       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R4851                                                                                       | NRSA63J-6R8X | MG RESISTOR            | 6.8Ω,1/16W  | R6133                                                                                       | NRSA63J-562X | MG RESISTOR            | 5.6kΩ,1/16W |
| R4852                                                                                       | NRSA63J-6R8X | MG RESISTOR            | 6.8Ω,1/16W  | R6134                                                                                       | NRSA63J-682X | MG RESISTOR            | 6.8kΩ,1/16W |
| R4853                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R6135                                                                                       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  |
| R4854                                                                                       | NRSA63J-202X | MG RESISTOR            | 2kΩ,1/16W   | R6136                                                                                       | NRSA63J-823X | MG RESISTOR            | 82kΩ,1/16W  |
| R4855                                                                                       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W  | R6141                                                                                       | NRSA63J-4R7X | MG RESISTOR            | 4.7Ω,1/16W  |
| R4856                                                                                       | NRSA63J-6R8X | MG RESISTOR            | 6.8Ω,1/16W  | R6142                                                                                       | NRVA63D-123X | CMF RESISTOR           | 12kΩ,1/16W  |
| R4857                                                                                       | NRSA63J-6R8X | MG RESISTOR            | 6.8Ω,1/16W  | R6143                                                                                       | NRVA63D-103X | CMF RESISTOR           | 10kΩ,1/16W  |
| R4858                                                                                       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W  | R6144                                                                                       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R4859                                                                                       | NRSA63J-271X | MG RESISTOR            | 270Ω,1/16W  | R6145                                                                                       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R4860                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R6146                                                                                       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W |
| R4861                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R6151                                                                                       | NRSA63J-4R7X | MG RESISTOR            | 4.7Ω,1/16W  |
| R4862                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R6153                                                                                       | NRVA63D-363X | CMF RESISTOR           | 36kΩ,1/16W  |
| R4863                                                                                       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R6154                                                                                       | NRVA63D-242X | CMF RESISTOR           | 2.4kΩ,1/16W |
| R4864                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R6155                                                                                       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W  |
| R5501                                                                                       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | R6156                                                                                       | NRSA63J-273X | MG RESISTOR            | 27kΩ,1/16W  |
| R5503                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R6157                                                                                       | NRSA63J-153X | MG RESISTOR            | 15kΩ,1/16W  |
| R5504                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R6159                                                                                       | NRVA63D-683X | CMF RESISTOR           | 68kΩ,1/16W  |
| R5505                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R6160                                                                                       | NRVA63D-913X | CMF RESISTOR           | 91kΩ,1/16W  |
| R5506                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R6161                                                                                       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W  |



| #      | △ REF No. | PART No.     | PART NAME, DESCRIPTION |             | #     | △ REF No. | PART No.     | PART NAME, DESCRIPTION |              |
|--------|-----------|--------------|------------------------|-------------|-------|-----------|--------------|------------------------|--------------|
| R6162  |           | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W  | C1011 |           | NEAB1CM-226X | E CAPACITOR            | 22μF,16V     |
| R6163  |           | NRVA63D-513X | CMF RESISTOR           | 51kΩ,1/16W  | C1012 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6164  |           | NRVA63D-823X | CMF RESISTOR           | 82kΩ,1/16W  | C1013 |           | NDC31HJ-120X | CAPACITOR              | 12pF,50V     |
| R6165  |           | NRVA63D-473X | CMF RESISTOR           | 47kΩ,1/16W  | C1015 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6166  |           | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | C1016 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R6167  |           | NRSA63J-222X | MG RESISTOR,A,B        | 2.2kΩ,1/16W | C1017 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R6168  |           | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W | C1018 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R6169  |           | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | C1019 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R6170  |           | NRSA63J-823X | MG RESISTOR            | 82kΩ,1/16W  | C1021 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R6171  |           | NRSA63J-272X | MG RESISTOR            | 2.7kΩ,1/16W | C1022 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6201  |           | NRSA63J-103X | MG RESISTOR,B,C        | 10kΩ,1/16W  | C1023 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6202  |           | NRSA63J-100X | MG RESISTOR,B,C        | 10Ω,1/16W   | C1024 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6203  |           | NRSA63J-103X | MG RESISTOR,B,C        | 10kΩ,1/16W  | C1025 |           | NCF31HZ-223X | CAPACITOR              | 0.022μF,50V  |
| R6205  |           | NRSA63J-184X | MG RESISTOR,B,C        | 180kΩ,1/16W | C1026 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6206  |           | NRSA63J-102X | MG RESISTOR,B,C        | 1kΩ,1/16W   | C1027 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6301  |           | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | C1028 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6302  |           | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | C1029 |           | NEA71CM-106X | E CAPACITOR            | 10μF,16V     |
| R6303  |           | NRSA63J-224X | MG RESISTOR            | 220kΩ,1/16W | C1031 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R6304  |           | NRSA63J-183X | MG RESISTOR            | 18kΩ,1/16W  | C1032 |           | NEA70JM-226X | E CAPACITOR            | 22μF,6.3V    |
| R6305  |           | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | C1033 |           | NEA71HM-335X | E CAPACITOR            | 3.3μF,50V    |
| R6307  |           | NRSA63J-104X | MG RESISTOR            | 100kΩ,1/16W | C1034 |           | NEA70JM-226X | E CAPACITOR            | 22μF,6.3V    |
| R6308  |           | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | C1036 |           | NCB31HK-472X | CAPACITOR              | 0.0047μF,50V |
| R7801  |           | NRSA63J-101X | MG RESISTOR,C          | 100Ω,1/16W  | C1037 |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V   |
| R7802  |           | NRSA63J-563X | MG RESISTOR,C          | 56kΩ,1/16W  | C1401 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R7803  |           | NRSA63J-101X | MG RESISTOR,C          | 100Ω,1/16W  | C1402 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R7804  |           | NRSA63J-101X | MG RESISTOR,C          | 100Ω,1/16W  | C1405 |           | NCB31EK-223X | CAPACITOR              | 0.022μF,25V  |
| R7812  |           | NRVA63D-153X | CMF RESISTOR,C         | 15kΩ,1/16W  | C1406 |           | NCB31EK-223X | CAPACITOR              | 0.022μF,25V  |
| R7813  |           | NRSA63J-224X | MG RESISTOR,C          | 220kΩ,1/16W | C1407 |           | NBE40JM-226X | T CAPACITOR            | 22μF,6.3V    |
| R7814  |           | NRSA63J-224X | MG RESISTOR,C          | 220kΩ,1/16W | C1408 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R7815  |           | NRSA63J-393X | MG RESISTOR,C          | 39kΩ,1/16W  | C1414 |           | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| R7816  |           | NRSA63J-0R0X | MG RESISTOR,C          | 0Ω,1/16W    | C1415 |           | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| R7817  |           | NRSA63J-103X | MG RESISTOR,A          | 10kΩ,1/16W  | C1416 |           | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| R7818  |           | NRSA63J-562X | MG RESISTOR,A          | 5.6kΩ,1/16W | C1417 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| R7819  |           | NRSA63J-103X | MG RESISTOR,A          | 10kΩ,1/16W  | C1418 |           | NBE40JM-226X | T CAPACITOR            | 22μF,6.3V    |
| R7820  |           | NRSA63J-822X | MG RESISTOR,A          | 8.2kΩ,1/16W | C1419 |           | NBE40JM-226X | T CAPACITOR            | 22μF,6.3V    |
| RA1001 |           | NRZ0038-102X | NETWORK RESISTOR       | 1kΩ         | C1420 |           | NCB31EK-223X | CAPACITOR              | 0.022μF,25V  |
| RA1002 |           | NRZ0038-102X | NETWORK RESISTOR       | 1kΩ         | C1421 |           | NCB31EK-223X | CAPACITOR              | 0.022μF,25V  |
| RA1003 |           | NRZ0038-104X | NETWORK RESISTOR       | 100kΩ       | C2151 |           | NCB31HK-472X | CAPACITOR              | 0.0047μF,50V |
| RA1004 |           | NRZ0038-104X | NETWORK RESISTOR       | 100kΩ       | C2152 |           | NCB31HK-472X | CAPACITOR              | 0.0047μF,50V |
| RA1005 |           | NRZ0038-102X | NETWORK RESISTOR       | 1kΩ         | C2153 |           | NDC31HJ-101X | CAPACITOR              | 100pF,50V    |
| RA1006 |           | NRZ0038-102X | NETWORK RESISTOR       | 1kΩ         | C2154 |           | NDC31HJ-101X | CAPACITOR              | 100pF,50V    |
| RA1401 |           | NRZ0038-473X | NETWORK RESISTOR       | 47kΩ        | C3001 |           | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    |
| RA1402 |           | NRZ0038-102X | NETWORK RESISTOR       | 1kΩ         | C3002 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| RA1403 |           | NRZ0038-102X | NETWORK RESISTOR       | 1kΩ         | C3003 |           | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    |
| RA4303 |           | NRZ0034-100W | NETWORK RESISTOR       | 10Ω         | C3004 |           | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    |
| RA4304 |           | NRZ0034-100W | NETWORK RESISTOR       | 10Ω         | C3005 |           | NCB30JK-105X | CAPACITOR              | 1μF,6.3V     |
| RA4305 |           | NRZ0034-100W | NETWORK RESISTOR       | 10Ω         | C3006 |           | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| C501   |           | NCB31CK-104X | CAPACITOR,B,C          | 0.1μF,16V   | C3009 |           | NDC31HJ-120X | CAPACITOR              | 12pF,50V     |
| C502   |           | NCB31CK-104X | CAPACITOR,B,C          | 0.1μF,16V   | C3010 |           | NDC31HJ-120X | CAPACITOR              | 12pF,50V     |
| C503   |           | NCB31CK-104X | CAPACITOR,B,C          | 0.1μF,16V   | C3011 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C504   |           | NCB31CK-104X | CAPACITOR,B,C          | 0.1μF,16V   | C3012 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C505   |           | NCB31CK-104X | CAPACITOR,B,C          | 0.1μF,16V   | C3022 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C506   |           | NCB31CK-104X | CAPACITOR,B,C          | 0.1μF,16V   | C3023 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C1003  |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3027 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C1004  |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V  | C3028 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C1005  |           | NDC31HJ-330X | CAPACITOR              | 33pF,50V    | C3035 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C1006  |           | NDC31HJ-150X | CAPACITOR              | 15pF,50V    | C3037 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C1007  |           | NCF31HZ-223X | CAPACITOR              | 0.022μF,50V | C3038 |           | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| C1008  |           | NCF31HZ-103X | CAPACITOR              | 0.01μF,50V  | C3040 |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |
| C1009  |           | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3041 |           | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| C1010  |           | NBE20JM-226X | T CAPACITOR            | 22μF,6.3V   | C3042 |           | NCB21CK-474X | CAPACITOR              | 0.47μF,16V   |



| # △ REF No. | PART No.     | PART NAME, DESCRIPTION |             | # △ REF No. | PART No.     | PART NAME, DESCRIPTION |             |
|-------------|--------------|------------------------|-------------|-------------|--------------|------------------------|-------------|
| C3047       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C3332       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3048       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3333       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3049       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3334       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  |
| C3050       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3335       | NDC31HJ-100X | CAPACITOR              | 10pF,50V    |
| C3101       | NDC31HJ-271X | CAPACITOR              | 270pF,50V   | C3336       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3102       | NCB21CK-105X | CAPACITOR              | 1μF,16V     | C3337       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  |
| C3103       | NCB21CK-105X | CAPACITOR              | 1μF,16V     | C3401       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   |
| C3104       | NCB21CK-105X | CAPACITOR              | 1μF,16V     | C3402       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3105       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3404       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3106       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C3702       | NBE20JM-226X | T CAPACITOR            | 22μF,6.3V   |
| C3107       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C3704       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   |
| C3108       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3705       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  |
| C3109       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3706       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   |
| C3110       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | C3707       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  |
| C3201       | NBE40JM-226X | T CAPACITOR            | 22μF,6.3V   | C3708       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  |
| C3203       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C3709       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3204       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3710       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3205       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C3711       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  |
| C3207       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C3712       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  |
| C3208       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3713       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   |
| C3212       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3720       | NEA50GM-337X | E CAPACITOR            | 330μF,4.0V  |
| C3213       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3723       | NEA50GM-337X | E CAPACITOR            | 330μF,4.0V  |
| C3214       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3724       | NCB21CK-105X | CAPACITOR              | 1μF,16V     |
| C3215       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C3725       | NCB21CK-105X | CAPACITOR              | 1μF,16V     |
| C3217       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4301       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3218       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4302       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3219       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4303       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3220       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4304       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3221       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4305       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   |
| C3222       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4306       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3223       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4307       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   |
| C3224       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4308       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3227       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4309       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3228       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4310       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   |
| C3229       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C4311       | NBE40JM-226X | T CAPACITOR            | 22μF,6.3V   |
| C3230       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4312       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3301       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C4313       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V |
| C3302       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4314       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3303       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C4315       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V |
| C3304       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4316       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V |
| C3305       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C4317       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V |
| C3306       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4318       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3307       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C4319       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3308       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4320       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3309       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4321       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3310       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4322       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3311       | NDC31HJ-151X | CAPACITOR              | 150pF,50V   | C4323       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3312       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4324       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3313       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4325       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3314       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V | C4326       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3316       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C4327       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3317       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4328       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3318       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4329       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3319       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C4330       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3320       | NCB11CK-225X | CAPACITOR              | 2.2μF,16V   | C4331       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3321       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C4332       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   |
| C3322       | NCB31CK-683X | CAPACITOR              | 0.068μF,16V | C4333       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   |
| C3323       | NCB11CK-225X | CAPACITOR              | 2.2μF,16V   | C4334       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |
| C3324       | NCB31CK-333X | CAPACITOR              | 0.033μF,16V | C4335       | NDC31HJ-220X | CAPACITOR              | 22pF,50V    |
| C3326       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C4801       | NBE41AM-106X | T CAPACITOR            | 10μF,10V    |
| C3331       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C4802       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   |

| # △ REF No. | PART No.     | PART NAME, DESCRIPTION |             | # △ REF No. | PART No.     | PART NAME, DESCRIPTION |              |
|-------------|--------------|------------------------|-------------|-------------|--------------|------------------------|--------------|
| C4805       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C6011       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| C4806       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6012       | NCF31AZ-105X | CAPACITOR              | 1μF,10V      |
| C4808       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6013       | NCB31HK-561X | CAPACITOR              | 560pF,50V    |
| C4809       | NCF21CZ-105X | CAPACITOR              | 1μF,16V     | C6014       | NCB31HK-561X | CAPACITOR              | 560pF,50V    |
| C4810       | NCB21EK-104X | CAPACITOR              | 0.1μF,25V   | C6015       | NCB31CK-473X | CAPACITOR              | 0.047μF,16V  |
| C4812       | NCF21CZ-105X | CAPACITOR              | 1μF,16V     | C6016       | NCB31HK-272X | CAPACITOR              | 0.0027μF,50V |
| C4813       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V  | C6017       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    |
| C4851       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C6018       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    |
| C4852       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6019       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    |
| C4853       | NEAB1CM-226X | E CAPACITOR            | 22μF,16V    | C6020       | NCF31AZ-105X | CAPACITOR              | 1μF,10V      |
| C4854       | NBP41CM-156X | T CAPACITOR            | 15μF,16V    | C6021       | NCF31AZ-105X | CAPACITOR              | 1μF,10V      |
| C4855       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6101       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C4856       | NDC31HJ-330X | CAPACITOR              | 33pF,50V    | C6102       | NCB10JK-106X | CAPACITOR              | 10μF,6.3V    |
| C4857       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V | C6104       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V  |
| C4858       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V | C6111       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C4859       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V | C6112       | NCB10JK-106X | CAPACITOR              | 10μF,6.3V    |
| C4860       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V | C6114       | NCB31HK-102X | CAPACITOR              | 0.001μF,50V  |
| C4861       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6115       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    |
| C4863       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6116       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C4864       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V   | C6121       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C5501       | NBE41AM-106X | T CAPACITOR            | 10μF,10V    | C6122       | NCB11CK-105X | CAPACITOR              | 1μF,16V      |
| C5502       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6123       | NCB21CK-224X | CAPACITOR              | 0.22μF,16V   |
| C5503       | NBP41DM-106X | T CAPACITOR            | 10μF,20V    | C6131       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C5504       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6132       | NCB11CK-105X | CAPACITOR              | 1μF,16V      |
| C5505       | NBE40JM-476X | T CAPACITOR            | 47μF,6.3V   | C6133       | NCB21CK-224X | CAPACITOR              | 0.22μF,16V   |
| C5506       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6141       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C5507       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6142       | NCB11AK-475X | CAPACITOR              | 4.7μF,10V    |
| C5508       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6144       | NCB31HK-472X | CAPACITOR              | 0.0047μF,50V |
| C5509       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6145       | NDC31HJ-330X | CAPACITOR              | 33pF,50V     |
| C5510       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6146       | NDC31HJ-330X | CAPACITOR              | 33pF,50V     |
| C5511       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6151       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C5512       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6152       | NCB11CK-105X | CAPACITOR              | 1μF,16V      |
| C5513       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6153       | NCB11CK-105X | CAPACITOR              | 1μF,16V      |
| C5514       | NCB21CK-105X | CAPACITOR              | 1μF,16V     | C6154       | NCB11EK-105X | CAPACITOR              | 1μF,25V      |
| C5515       | NBP21VM-105X | T CAPACITOR            | 1μF,35V     | C6155       | NCB11EK-105X | CAPACITOR              | 1μF,25V      |
| C5602       | NCB21AK-105X | CAPACITOR              | 1μF,10V     | C6156       | NCB31HK-272X | CAPACITOR              | 0.0027μF,50V |
| C5603       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C6157       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| C5604       | NBE40GM-107X | T CAPACITOR            | 100μF,4.0V  | C6158       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| C5605       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6161       | NCB21CK-105X | CAPACITOR,A,B          | 1μF,16V      |
| C5606       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6162       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C5607       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6163       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C5608       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6201       | NBE20JM-106X | T CAPACITOR,B,C        | 10μF,6.3V    |
| C5609       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C6301       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| C5610       | NCB21AK-105X | CAPACITOR              | 1μF,10V     | C6404       | NCB21CK-105X | CAPACITOR              | 1μF,16V      |
| C5611       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C7801       | NCF31CZ-104X | CAPACITOR,C            | 0.1μF,16V    |
| C5612       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C7802       | NCF31CZ-104X | CAPACITOR,C            | 0.1μF,16V    |
| C5613       | NCB21AK-105X | CAPACITOR              | 1μF,10V     | C7803       | NCB31HK-102X | CAPACITOR,C            | 0.001μF,50V  |
| C5614       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V   | C7805       | NCF21CZ-105X | CAPACITOR              | 1μF,16V      |
| C5615       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C7806       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| C5616       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C7807       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    |
| C5617       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | C7810       | NCF21CZ-105X | CAPACITOR,C            | 1μF,16V      |
| C6001       | NCB21CK-105X | CAPACITOR              | 1μF,16V     | C7811       | NCF21CZ-105X | CAPACITOR,C            | 1μF,16V      |
| C6002       | NCB21CK-105X | CAPACITOR              | 1μF,16V     | C7812       | NBE21AM-106X | T CAPACITOR,C          | 10μF,10V     |
| C6003       | NEA71CM-106X | E CAPACITOR            | 10μF,16V    | C7814       | NCB21AK-105X | CAPACITOR,A,B          | 1μF,10V      |
| C6004       | NDC31HJ-101X | CAPACITOR              | 100pF,50V   | C7815       | NBE20JM-106X | T CAPACITOR,A,B        | 10μF,6.3V    |
| C6005       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V   | L501        | NQL315K-100X | COIL,B,C               | 10μH         |
| C6006       | NCB21CK-473X | CAPACITOR              | 0.047μF,16V | L1001       | NQL315K-220X | COIL                   | 22μH         |
| C6007       | NCB21CK-224X | CAPACITOR              | 0.22μF,16V  | L1002       | NQL315K-220X | COIL                   | 22μH         |
| C6008       | NCB31CK-473X | CAPACITOR              | 0.047μF,16V | L1003       | NQL315K-220X | COIL                   | 22μH         |
| C6009       | NCB31CK-473X | CAPACITOR              | 0.047μF,16V | L1005       | NQL184J-390X | COIL                   | 39μH         |
| C6010       | NCF31AZ-105X | CAPACITOR              | 1μF,10V     | L1401       | NQL164K-100X | COIL                   | 10μH         |

| # ▲ REF No. | PART No.      | PART NAME, DESCRIPTION |          | # ▲ REF No.                | PART No.       | PART NAME, DESCRIPTION |             |
|-------------|---------------|------------------------|----------|----------------------------|----------------|------------------------|-------------|
| L2151       | NRSA63J-0R0X  | MG RESISTOR            | 0Ω,1/16W |                            | QGF0507F1-20X  | FPC CONNECTOR,C        |             |
| L2152       | NRSA63J-0R0X  | MG RESISTOR            | 0Ω,1/16W | CN105                      | QGB0801M1-30X  | CONNECTOR              |             |
| L3001       | NQR0129-002X  | FERRITE BEAD           |          | CN106                      | QGF0507F1-18X  | FPC CONNECTOR          |             |
| L3002       | NQR0129-002X  | FERRITE BEAD           |          | CN107                      | QGF0507F1-22X  | FPC CONNECTOR          |             |
| L3004       | NQR0129-002X  | FERRITE BEAD           |          | CN108                      | QGA1201F2-02X  | CONNECTOR,B,C          |             |
| L3101       | NQR0129-002X  | FERRITE BEAD           |          | CN109                      | QGF0507F1-15X  | FPC CONNECTOR          |             |
| L3102       | NQR0129-002X  | FERRITE BEAD           |          | CN110                      | QGF0507F1-10X  | FPC CONNECTOR          |             |
| L3103       | NQR0337-001X  | COIL                   |          | ▲ F6001                    | NMFZ006-R50X-K | FUSE                   | 0.5A        |
| L3202       | NQR0129-002X  | FERRITE BEAD           |          | ▲ F6002                    | NMFZ006-1R6X-K | FUSE                   | 1.6A        |
| L3203       | NQR0129-002X  | FERRITE BEAD           |          | ▲ F6003                    | NMFZ006-1R6X-K | FUSE                   | 1.6A        |
| L3204       | NQR0129-002X  | FERRITE BEAD           |          | ▲ F6004                    | NMFZ006-R50X-K | FUSE                   | 0.5A        |
| L3301       | NQR0129-002X  | FERRITE BEAD           |          | ▲ F7801                    | NMFZ006-R20X-K | FUSE                   | 0.2A        |
| L3302       | NQR0129-002X  | FERRITE BEAD           |          | OT1                        | PU59915-105    | #500SPACER0.01         |             |
| L3303       | NQR0129-002X  | FERRITE BEAD           |          | TH3201                     | NAD0025-222X   | N THERMISTOR           |             |
| L3304       | NQR0129-002X  | FERRITE BEAD           |          |                            |                |                        |             |
| L3401       | NQR0129-002X  | FERRITE BEAD           |          |                            |                |                        |             |
| L3402       | NQR0129-002X  | FERRITE BEAD           |          |                            |                |                        |             |
| L3701       | NQL402M-100X  | COIL                   | 10μH     | *****                      |                |                        |             |
| L4301       | NQR0129-002X  | FERRITE BEAD           |          | SECOND BOARD ASSEMBLY <02> |                |                        |             |
| L4302       | NQR0129-002X  | FERRITE BEAD           |          |                            |                |                        |             |
| L4303       | NQL315K-100X  | COIL                   | 10μH     | PW1                        | YB10259A1-01   | SECOND BOARD ASSY      |             |
| L4304       | NQL315K-100X  | COIL                   | 10μH     | IC1601                     | BA6866KV       | IC                     |             |
| L4305       | NQR0129-002X  | FERRITE BEAD           |          | IC2101                     | AK4518-VF-X    | IC                     |             |
| L4801       | NQL315K-220X  | COIL                   | 22μH     | IC2201                     | LA74200W       | IC                     |             |
| L4851       | NQR0129-002X  | FERRITE BEAD           |          | IC3501                     | AN3731FHQ      | IC(DIGITAL)            |             |
| L4852       | NQL164K-220X  | COIL                   | 22μH     | Q1601                      | UMC3N          | TRANSISTOR             |             |
| L4853       | NQL302N-100X  | COIL                   | 10μH     | Q2205                      | UMX1N          | PAIR TRANSISTOR        |             |
| L5501       | NQR0129-002X  | FERRITE BEAD           |          | Q2206                      | 2SC4617/QR/-X  | TRANSISTOR             |             |
| L5502       | NQR0129-002X  | FERRITE BEAD           |          | Q2401                      | 2SC4617/QR/-X  | TRANSISTOR             |             |
| L5503       | NQR0129-002X  | FERRITE BEAD           |          | Q2402                      | 2SD1511/R/-X   | TRANSISTOR             |             |
| L5504       | NQL315K-100X  | COIL                   | 10μH     | Q2404                      | 2SC4617/QR/-X  | TRANSISTOR             |             |
| L5505       | NQL315K-100X  | COIL                   | 10μH     | Q2502                      | DTC144EE       | TRANSISTOR             |             |
| L5506       | NQL045M-4R7X  | COIL                   | 4.7μH    | Q2504                      | DTA143EE       | TRANSISTOR             |             |
| L5601       | NQR0129-002X  | FERRITE BEAD           |          | Q2506                      | 2SA1774/QR/-X  | TRANSISTOR             |             |
| L6001       | NQLZ011-4R7X  | COIL                   | 4.7μH    | Q2509                      | 2SC4617/QR/-X  | TRANSISTOR             |             |
| L6002       | NQLZ011-4R7X  | COIL                   | 4.7μH    | Q2601                      | 2SA1774/QR/-X  | TRANSISTOR             |             |
| L6101       | NQLZ011-390X  | COIL                   | 39μH     | Q2602                      | 2SA1774/QR/-X  | TRANSISTOR             |             |
| L6111       | NQLZ011-390X  | COIL                   | 39μH     | Q3501                      | 2SC4226/4/-X   | TRANSISTOR             |             |
| L6112       | NQL144K-220X  | COIL                   | 22μH     | Q3502                      | 2SD1979/S/-X   | TRANSISTOR             |             |
| L6121       | NQL32CM-470X  | COIL                   | 47μH     | Q3503                      | 2SD1979/S/-X   | TRANSISTOR             |             |
| L6131       | NQL32CM-470X  | COIL                   | 47μH     | Q3504                      | 2SC4226/4/-X   | TRANSISTOR             |             |
| L6141       | NQLZ011-390X  | COIL                   | 39μH     | Q3505                      | 2SA1577/QR/-X  | TRANSISTOR             |             |
| L6151       | NQLZ011-221X  | COIL                   | 220μH    | Q3506                      | DTC144EE       | TRANSISTOR             |             |
| L6401       | NQL144K-220X  | COIL                   | 22μH     | D1602                      | DAP222         | DIODE                  |             |
| L7803       | NQL144K-100X  | COIL                   | 10μH     | D1603                      | DAP222         | DIODE                  |             |
| X1001       | NAX0294-001X  | RESONATOR              |          | D1604                      | DAP222         | DIODE                  |             |
| X1002       | NAX0325-001X  | CRYSTAL RESONATOR      |          | D2203                      | DAN222         | DIODE                  |             |
| X3001       | NAX0206-001X  | CRYSTAL RESONATOR      |          | D2501                      | DAP222         | DIODE                  |             |
| X3301       | NAX0296-001X  | C OSCILLATOR           |          | R1601                      | NRSA63J-681X   | MG RESISTOR            | 680Ω,1/16W  |
| X5501       | NAX0319-001X  | CXO                    |          | R1602                      | NRSA63J-124X   | MG RESISTOR            | 120kΩ,1/16W |
| WR1         | QUB450-07VLA2 | SIN TWIST WIRE         |          | R1603                      | NRSA63J-472X   | MG RESISTOR            | 4.7kΩ,1/16W |
| J501        | NNZ0028-001   | D CONNECTOR            |          | R1604                      | NRSA63J-104X   | MG RESISTOR            | 100kΩ,1/16W |
| J502        | LY31247-001A  | BATT.TERM.UNIT         |          | R1605                      | NRV142F-R22X   | CMF RESISTOR           | 0.22Ω,1/4W  |
| J503        | PEMC1203      | MINI JACK              |          | R1606                      | NRSA63J-103X   | MG RESISTOR            | 10kΩ,1/16W  |
| J504        | LY30862-001B  | JACK UNIT              |          | R1608                      | NRSA63J-103X   | MG RESISTOR            | 10kΩ,1/16W  |
| J505        | QND0068-001   | S JACK                 |          | R1609                      | NRV142F-R33X   | CMF RESISTOR           | 0.33Ω,1/4W  |
| ▲ J506      | QAB0022-001   | LI BATTERY             |          | R1610                      | NRSA63J-102X   | MG RESISTOR            | 1kΩ,1/16W   |
| J507        | QNS0152-001   | 2.5 JACK,B,C           |          | R1611                      | NRSA63J-102X   | MG RESISTOR            | 1kΩ,1/16W   |
| CN101       | QGB0509M2-A0X | CONNECTOR              |          | R1612                      | NRSA63J-104X   | MG RESISTOR            | 100kΩ,1/16W |
| CN102       | QGF0504C1-40X | FPC CONNECTOR          |          | R1613                      | NRSA63J-102X   | MG RESISTOR            | 1kΩ,1/16W   |
| CN104       | QGF0507F1-10X | FPC CONNECTOR,A,B      |          |                            |                |                        |             |

| # △ REF No. | PART No.     | PART NAME, DESCRIPTION |             | # △ REF No. | PART No.     | PART NAME, DESCRIPTION |              |
|-------------|--------------|------------------------|-------------|-------------|--------------|------------------------|--------------|
| R1614       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W | R2505       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W   |
| R1615       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R2508       | NRSA63J-155X | MG RESISTOR            | 1.5MΩ,1/16W  |
| R1616       | NRSA63J-182X | MG RESISTOR            | 1.8kΩ,1/16W | R2509       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W    |
| R1617       | NRSA63J-474X | MG RESISTOR            | 470kΩ,1/16W | R2510       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W    |
| R1618       | NRSA63J-154X | MG RESISTOR            | 150kΩ,1/16W | R2601       | NRSA63J-152X | MG RESISTOR            | 1.5kΩ,1/16W  |
| R1619       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W | R2602       | NRSA63J-152X | MG RESISTOR            | 1.5kΩ,1/16W  |
| R1620       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R2606       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W  |
| R1621       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R2607       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W  |
| R1622       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R2608       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W  |
| R1623       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R2609       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W  |
| R1624       | NRSA63J-123X | MG RESISTOR            | 12kΩ,1/16W  | R2610       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W   |
| R1625       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2611       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W   |
| R1626       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2612       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W  |
| R1627       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2613       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W  |
| R1628       | NRSA63J-271X | MG RESISTOR            | 270Ω,1/16W  | R2614       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W  |
| R1629       | NRSA63J-105X | MG RESISTOR            | 1MΩ,1/16W   | R2615       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W  |
| R1630       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2616       | NRSA63J-682X | MG RESISTOR            | 6.8kΩ,1/16W  |
| R1631       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2617       | NRSA63J-682X | MG RESISTOR            | 6.8kΩ,1/16W  |
| R1632       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2622       | NRSA63J-153X | MG RESISTOR            | 15kΩ,1/16W   |
| R1633       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2623       | NRSA63J-153X | MG RESISTOR            | 15kΩ,1/16W   |
| R1634       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2624       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W     |
| R1635       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R2625       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W     |
| R1636       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | R2626       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W   |
| R1637       | NRSA63J-124X | MG RESISTOR            | 120kΩ,1/16W | R2627       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W   |
| R1642       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2628       | NRSA63J-153X | MG RESISTOR            | 15kΩ,1/16W   |
| R1644       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R2629       | NRSA63J-153X | MG RESISTOR            | 15kΩ,1/16W   |
| R1646       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3502       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W   |
| R2102       | NRSA63J-100X | MG RESISTOR            | 10Ω,1/16W   | R3504       | NRSA63J-152X | MG RESISTOR            | 1.5kΩ,1/16W  |
| R2108       | NRSA63J-471X | MG RESISTOR            | 470Ω,1/16W  | R3506       | NRSA63J-471X | MG RESISTOR            | 470Ω,1/16W   |
| R2109       | NRSA63J-471X | MG RESISTOR            | 470Ω,1/16W  | R3507       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W   |
| R2112       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3508       | NRSA63J-272X | MG RESISTOR            | 2.7kΩ,1/16W  |
| R2113       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3509       | NRSA63J-331X | MG RESISTOR            | 330Ω,1/16W   |
| R2114       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3510       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W    |
| R2202       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R3511       | NRSA63J-152X | MG RESISTOR            | 1.5kΩ,1/16W  |
| R2203       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R3512       | NRSA63J-123X | MG RESISTOR            | 12kΩ,1/16W   |
| R2205       | NRSA63J-472X | MG RESISTOR            | 4.7kΩ,1/16W | R3513       | NRSA63J-680X | MG RESISTOR            | 68Ω,1/16W    |
| R2207       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3514       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W    |
| R2209       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W | R3515       | NRSA63J-181X | MG RESISTOR            | 180Ω,1/16W   |
| R2210       | NRSA63J-392X | MG RESISTOR            | 3.9kΩ,1/16W | R3516       | NRSA63J-181X | MG RESISTOR            | 180Ω,1/16W   |
| R2212       | NRSA63J-2R7X | MG RESISTOR            | 2.7Ω,1/16W  | R3517       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W    |
| R2213       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3518       | NRSA63J-680X | MG RESISTOR            | 68Ω,1/16W    |
| R2214       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3519       | NRSA63J-123X | MG RESISTOR            | 12kΩ,1/16W   |
| R2215       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | R3520       | NRSA63J-152X | MG RESISTOR            | 1.5kΩ,1/16W  |
| R2216       | NRSA63J-2R7X | MG RESISTOR            | 2.7Ω,1/16W  | R3521       | NRSA63J-100X | MG RESISTOR            | 10Ω,1/16W    |
| R2219       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R3523       | NRSA63J-473X | MG RESISTOR            | 47kΩ,1/16W   |
| R2220       | NRSA63J-102X | MG RESISTOR            | 1kΩ,1/16W   | R3524       | NRSA63J-392X | MG RESISTOR            | 3.9kΩ,1/16W  |
| R2222       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W | C1601       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| R2223       | NRSA63J-332X | MG RESISTOR            | 3.3kΩ,1/16W | C1602       | NBE21AM-106X | T CAPACITOR            | 10μF,10V     |
| R2401       | NRSA63J-392X | MG RESISTOR            | 3.9kΩ,1/16W | C1603       | NBE21AM-106X | T CAPACITOR            | 10μF,10V     |
| R2402       | NRSA63J-183X | MG RESISTOR            | 18kΩ,1/16W  | C1605       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    |
| R2403       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | C1606       | NCB31HK-152X | CAPACITOR              | 0.0015μF,50V |
| R2404       | NRSA63J-113X | MG RESISTOR            | 11kΩ,1/16W  | C1607       | NCB31CK-473X | CAPACITOR              | 0.047μF,16V  |
| R2406       | NRSA63J-820X | MG RESISTOR            | 82Ω,1/16W   | C1614       | NBE21AM-106X | T CAPACITOR            | 10μF,10V     |
| R2407       | NRSA63J-820X | MG RESISTOR            | 82Ω,1/16W   | C1618       | NCB31HK-222X | CAPACITOR              | 0.0022μF,50V |
| R2408       | NRSA63J-820X | MG RESISTOR            | 82Ω,1/16W   | C1619       | NCB31HK-222X | CAPACITOR              | 0.0022μF,50V |
| R2409       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W    | C1620       | NCB31HK-222X | CAPACITOR              | 0.0022μF,50V |
| R2410       | NRSA63J-222X | MG RESISTOR            | 2.2kΩ,1/16W | C1621       | NCB21AK-105X | CAPACITOR              | 1μF,10V      |
| R2501       | NRSA63J-103X | MG RESISTOR            | 10kΩ,1/16W  | C1622       | NCB31CK-473X | CAPACITOR              | 0.047μF,16V  |
| R2502       | NRSA63J-273X | MG RESISTOR            | 27kΩ,1/16W  | C1623       | NCB31CK-473X | CAPACITOR              | 0.047μF,16V  |
| R2503       | NRSA63J-563X | MG RESISTOR            | 56kΩ,1/16W  | C1624       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   |
| R2504       | NRSA63J-394X | MG RESISTOR            | 390kΩ,1/16W | C1625       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    |



| # △ REF No. | PART No.     | PART NAME, DESCRIPTION |              | # △ REF No. | PART No.      | PART NAME, DESCRIPTION |              |
|-------------|--------------|------------------------|--------------|-------------|---------------|------------------------|--------------|
| C1626       | NCB31HK-222X | CAPACITOR              | 0.0022μF,50V | C2635       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C1627       | NCB31HK-472X | CAPACITOR              | 0.0047μF,50V | C2636       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C1628       | NCB21CK-334X | CAPACITOR              | 0.33μF,16V   | C2639       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C1632       | NBE21AM-106X | T CAPACITOR            | 10μF,10V     | C2640       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C1633       | NCF21CZ-684X | CAPACITOR              | 0.68μF,16V   | C2641       | NCB31CK-104X  | CAPACITOR              | 0.1μF,16V    |
| C1635       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C2642       | NCB31CK-104X  | CAPACITOR              | 0.1μF,16V    |
| C2101       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    | C3501       | NCB31HK-122X  | CAPACITOR              | 0.0012μF,50V |
| C2102       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    | C3502       | NCB31CK-104X  | CAPACITOR              | 0.1μF,16V    |
| C2103       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3503       | NCB31HK-102X  | CAPACITOR              | 0.001μF,50V  |
| C2104       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3504       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2105       | NBE20JM-475X | T CAPACITOR            | 4.7μF,6.3V   | C3505       | NDC31HJ-470X  | CAPACITOR              | 47pF,50V     |
| C2106       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3506       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2107       | NCB21AK-105X | CAPACITOR              | 1μF,10V      | C3507       | NCB31HK-681X  | CAPACITOR              | 680pF,50V    |
| C2108       | NCB21AK-105X | CAPACITOR              | 1μF,10V      | C3508       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| C2109       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3509       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2110       | NCB31HK-222X | CAPACITOR              | 0.0022μF,50V | C3510       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2111       | NCB31HK-222X | CAPACITOR              | 0.0022μF,50V | C3511       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2112       | NBE20JM-475X | T CAPACITOR            | 4.7μF,6.3V   | C3512       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2113       | NBE20JM-475X | T CAPACITOR            | 4.7μF,6.3V   | C3513       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2114       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3514       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2115       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3515       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2205       | NCB21AK-105X | CAPACITOR              | 1μF,10V      | C3516       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| C2206       | NCB21AK-105X | CAPACITOR              | 1μF,10V      | C3517       | NCB31HK-152X  | CAPACITOR              | 0.0015μF,50V |
| C2209       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3518       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| C2210       | NBE20JM-475X | T CAPACITOR            | 4.7μF,6.3V   | C3519       | NDC31HJ-330X  | CAPACITOR              | 33pF,50V     |
| C2211       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    | C3520       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2212       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3521       | NDC31HJ-220X  | CAPACITOR              | 22pF,50V     |
| C2213       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3522       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2214       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3523       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| C2215       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3524       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| C2216       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | C3525       | NDC31HJ-220X  | CAPACITOR              | 22pF,50V     |
| C2218       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    | C3526       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2219       | NEA70JM-476X | E CAPACITOR            | 47μF,6.3V    | C3527       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2220       | NEA70JM-476X | E CAPACITOR            | 47μF,6.3V    | C3528       | NDC31HJ-330X  | CAPACITOR              | 33pF,50V     |
| C2224       | NCB21AK-105X | CAPACITOR              | 1μF,10V      | C3529       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| C2225       | NCB21AK-105X | CAPACITOR              | 1μF,10V      | C3530       | NCB31HK-152X  | CAPACITOR              | 0.0015μF,50V |
| C2226       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    | C3531       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2401       | NEA70JM-476X | E CAPACITOR            | 47μF,6.3V    | C3532       | NBE40JM-226X  | T CAPACITOR            | 22μF,6.3V    |
| C2402       | NEA70JM-476X | E CAPACITOR            | 47μF,6.3V    | C3533       | NCB31EK-103X  | CAPACITOR              | 0.01μF,25V   |
| C2403       | NBE21AM-106X | T CAPACITOR            | 10μF,10V     | C3534       | NBE40JM-226X  | T CAPACITOR            | 22μF,6.3V    |
| C2603       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   | C3535       | NBE40JM-226X  | T CAPACITOR            | 22μF,6.3V    |
| C2604       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   | L1601       | NQL315K-100X  | COIL                   | 10μH         |
| C2609       | NCB31CK-683X | CAPACITOR              | 0.068μF,16V  | L2101       | NQL315K-100X  | COIL                   | 10μH         |
| C2610       | NCB31CK-683X | CAPACITOR              | 0.068μF,16V  | L2201       | NQL092K-R12X  | COIL                   | 0.12μH       |
| C2611       | NCB31EK-153X | CAPACITOR              | 0.015μF,25V  | L2202       | NQL092K-R12X  | COIL                   | 0.12μH       |
| C2612       | NCB31EK-153X | CAPACITOR              | 0.015μF,25V  | L2601       | NRSA63J-0R0X  | MG RESISTOR            | 0Ω,1/16W     |
| C2613       | NCB31EK-123X | CAPACITOR              | 0.012μF,25V  | L2602       | NRSA63J-0R0X  | MG RESISTOR            | 0Ω,1/16W     |
| C2614       | NCB31EK-123X | CAPACITOR              | 0.012μF,25V  | L2603       | NRSA63J-0R0X  | MG RESISTOR            | 0Ω,1/16W     |
| C2615       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | L3501       | NQL402M-100X  | COIL                   | 10μH         |
| C2616       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | L3502       | NQL402M-100X  | COIL                   | 10μH         |
| C2617       | NCB21AK-105X | CAPACITOR              | 1μF,10V      | L3503       | NQL085J-220X  | COIL                   | 22μH         |
| C2618       | NCB21AK-105X | CAPACITOR              | 1μF,10V      | L3504       | NQL085J-220X  | COIL                   | 22μH         |
| C2619       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | L3505       | NQL402M-100X  | COIL                   | 10μH         |
| C2620       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | L3506       | NQL402M-100X  | COIL                   | 10μH         |
| C2621       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   | L3507       | NQL315K-100X  | COIL                   | 10μH         |
| C2622       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   | CN301       | QGB0509L1-A0X | CONNECTOR              |              |
| C2623       | NBE20JM-475X | T CAPACITOR            | 4.7μF,6.3V   | CN302       | QGA1201F2-03X | CONNECTOR              |              |
| C2624       | NBE20JM-475X | T CAPACITOR            | 4.7μF,6.3V   | CN304       | QGA1201F2-02X | CONNECTOR              |              |
| C2631       | NBE20GM-226X | T CAPACITOR            | 22μF,4.0V    | CN401       | QGF0506F1-35X | FPC CONNECTOR          |              |
| C2633       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | CN402       | QGF0503F2-18X | FFC/FPC CONNECTOR      |              |
| C2634       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | CN403       | QGF0501F2-06X | FPC CONNECTOR          |              |



| # △ REF No. | PART No.      | PART NAME, DESCRIPTION |
|-------------|---------------|------------------------|
| CN404       | QGF0512C1-08X | FPC CONNECTOR          |
| SD1         | LY30969-001A  | SHIELD CASE            |
| SD2         | LY31240-001A  | SHIELD CASE            |

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#### JUNCTION BOARD ASSEMBLY <03>

|       |               |                     |
|-------|---------------|---------------------|
| PW2   | YB10259A2-01  | JUNCTION BOARD ASSY |
| SW501 | NSW0095-001X  | DETECT SWITCH       |
| CN501 | QGF0506F1-35X | FPC CONNECTOR       |
| CN502 | QGF0507F1-15X | FPC CONNECTOR       |
| CN503 | QGF0505F2-11X | FPC CONNECTOR       |
| CN504 | QGF0501F2-06X | FPC CONNECTOR       |

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#### CCD BOARD ASSEMBLY <04>

|       |                |                         |
|-------|----------------|-------------------------|
| PW    | YB20859A-02-SS | CCD BOARD ASSY          |
| Q5002 | 2SC3931/CD/-X  | TRANSISTOR              |
| R5001 | NRSA02J-472X   | MG RESISTOR 4.7kΩ,1/10W |
| R5002 | NRSA02J-0R0X   | MG RESISTOR 0Ω,1/10W    |
| R5003 | NRSA02J-104X   | MG RESISTOR 100kΩ,1/10W |
| R5004 | NRS181J-0R0X   | MG RESISTOR 0Ω,1/8W     |
| C5001 | NCB21CK-104X   | CAPACITOR 0.1μF,16V     |
| C5002 | NBP41DM-106X   | T CAPACITOR 10μF,20V    |
| C5003 | NCB21CK-104X   | CAPACITOR 0.1μF,16V     |
| C5004 | NBE21AM-106X   | T CAPACITOR 10μF,10V    |
| C5006 | NCB21CK-104X   | CAPACITOR 0.1μF,16V     |
| C5007 | NCB21HK-222X   | CAPACITOR 0.0022μF,50V  |
| L5001 | NQL315K-100X   | COIL 10μH               |

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#### VF BL BOARD ASSEMBLY(DVF31U) <06>

|         |               |                         |
|---------|---------------|-------------------------|
| PW      | YB20862A      | BL BOARD ASSY           |
| Q7301   | 2SK2055       | MOS FET                 |
| R7301   | NRSA63J-104X  | MG RESISTOR 100kΩ,1/16W |
| C7301   | NBP41CM-226X  | T CAPACITOR 22μF,16V    |
| C7302   | NCB10JK-106X  | CAPACITOR 10μF,6.3V     |
| L7301   | NQL144K-100X  | COIL 10μH               |
| BL7301  | NLL0006-001   | LAMP                    |
| △ T7301 | NQH0004-001X  | FB TRANSF               |
| CN7301  | QGF0503C1-20X | FFC/FPC CONNECTOR       |
| CN7302  | QGF0503C1-16X | FFC/FPC CONNECTOR       |

| # △ REF No. | PART No. | PART NAME, DESCRIPTION |
|-------------|----------|------------------------|
| *****       |          |                        |

#### MONITOR BOARD ASSEMBLY <07>

|        |                |                          |
|--------|----------------|--------------------------|
| PW     | YB20860A-01    | MONITOR BOARD ASSY,A,B   |
|        | YB20860B-01    | MONITOR BOARD ASSY,C     |
| IC7601 | AN2533FH       | IC                       |
| IC7603 | X25057M8-2.7-X | IC                       |
| IC7604 | BU4053BCFV     | IC,C                     |
| IC7605 | TC4W53F        | IC,C                     |
| Q7501  | 2SC3647/ST/-X  | POW TRANSISTOR           |
| Q7502  | 2SC3647/ST/-X  | POW TRANSISTOR           |
| Q7503  | DTA144EE       | TRANSISTOR               |
| Q7504  | 2SC4617/QR/-X  | TRANSISTOR               |
| Q7505  | 2SC4617/QR/-X  | TRANSISTOR               |
| Q7506  | 2SC4617/QR/-X  | TRANSISTOR               |
| Q7601  | 2SC4617/QR/-X  | TRANSISTOR               |
| Q7602  | DTC144EE       | TRANSISTOR,C             |
| Q7603  | DTA144EE       | TRANSISTOR,C             |
| Q7604  | DTA114YE       | TRANSISTOR,C             |
| Q7605  | DTA114YE       | TRANSISTOR,C             |
| Q7606  | DTA114YE       | TRANSISTOR,C             |
| Q7607  | 2SC4617/QR/-X  | TRANSISTOR               |
| Q7608  | 2SA1774/QR/-X  | TRANSISTOR               |
| Q7609  | 2SC4097/QR/-X  | TRANSISTOR               |
| Q7610  | 2SA1577/QR/-X  | TRANSISTOR               |
| Q7615  | DTA144EE       | TRANSISTOR               |
| Q7616  | DTC144EE       | TRANSISTOR,C             |
| Q7617  | DTA114EE       | TRANSISTOR,C             |
| Q7618  | DTC144EE       | TRANSISTOR,C             |
| D7601  | RB471E         | SB DIODE                 |
| D7603  | MA111          | DIODE,C                  |
| R7501  | NRSA63J-102X   | MG RESISTOR 1kΩ,1/16W    |
| R7502  | NRSA63J-102X   | MG RESISTOR 1kΩ,1/16W    |
| R7503  | NRSA63J-102X   | MG RESISTOR 1kΩ,1/16W    |
| R7504  | NRSA63J-563X   | MG RESISTOR 56kΩ,1/16W   |
| R7505  | NRSA63J-223X   | MG RESISTOR 22kΩ,1/16W   |
| R7506  | NRSA63J-473X   | MG RESISTOR 47kΩ,1/16W   |
| R7507  | NRSA63J-473X   | MG RESISTOR 47kΩ,1/16W   |
| R7508  | NRSA63J-223X   | MG RESISTOR 22kΩ,1/16W   |
| R7509  | NRSA63J-103X   | MG RESISTOR 10kΩ,1/16W   |
| R7510  | NRSA63J-563X   | MG RESISTOR 56kΩ,1/16W   |
| R7601  | NRSA63J-101X   | MG RESISTOR,C 100Ω,1/16W |
| R7602  | NRSA63J-104X   | MG RESISTOR 100kΩ,1/16W  |
| R7603  | NRSA63J-104X   | MG RESISTOR 100kΩ,1/16W  |
| R7604  | NRSA63J-563X   | MG RESISTOR 56kΩ,1/16W   |
| R7605  | NRSA63J-100X   | MG RESISTOR 10Ω,1/16W    |
| R7606  | NRSA63J-100X   | MG RESISTOR 10Ω,1/16W    |
| R7607  | NRSA63J-100X   | MG RESISTOR 10Ω,1/16W    |
| R7608  | NRSA63J-100X   | MG RESISTOR,C 10Ω,1/16W  |
| R7609  | NRSA63J-100X   | MG RESISTOR,C 10Ω,1/16W  |
| R7610  | NRSA63J-563X   | MG RESISTOR 56kΩ,1/16W   |
| R7611  | NRSA63J-103X   | MG RESISTOR 10kΩ,1/16W   |
| R7612  | NRSA63J-103X   | MG RESISTOR 10kΩ,1/16W   |
| R7613  | NRSA63J-104X   | MG RESISTOR 100kΩ,1/16W  |
| R7616  | NRSA63J-101X   | MG RESISTOR 100Ω,1/16W   |
| R7617  | NRSA63J-102X   | MG RESISTOR 1kΩ,1/16W    |
| R7620  | NRSA63J-102X   | MG RESISTOR 1kΩ,1/16W    |
| R7627  | NRSA63J-101X   | MG RESISTOR 100Ω,1/16W   |
| R7631  | NRSA63J-103X   | MG RESISTOR 10kΩ,1/16W   |
| R7632  | NRSA63J-101X   | MG RESISTOR,A 100Ω,1/16W |

| #  REF No. | PART No.     | PART NAME, DESCRIPTION |              | #  REF No. | PART No.      | PART NAME, DESCRIPTION |              |
|---------------------------------------------------------------------------------------------|--------------|------------------------|--------------|---------------------------------------------------------------------------------------------|---------------|------------------------|--------------|
| R7633                                                                                       | NRSA63J-101X | MG RESISTOR,A          | 100Ω,1/16W   | C7614                                                                                       | NCF31CZ-104X  | CAPACITOR              | 0.1μF,16V    |
| R7634                                                                                       | NRSA63J-101X | MG RESISTOR,A          | 100Ω,1/16W   | C7615                                                                                       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| R7635                                                                                       | NRSA63J-220X | MG RESISTOR,C          | 22Ω,1/16W    | C7618                                                                                       | NCB31HK-822X  | CAPACITOR              | 0.0082μF,50V |
| R7636                                                                                       | NRSA63J-220X | MG RESISTOR,C          | 22Ω,1/16W    | C7619                                                                                       | NBE20JM-475X  | T CAPACITOR            | 4.7μF,6.3V   |
| R7637                                                                                       | NRVA63D-123X | CMF RESISTOR,C         | 12kΩ,1/16W   | C7620                                                                                       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| R7638                                                                                       | NRVA63D-123X | CMF RESISTOR,C         | 12kΩ,1/16W   | C7621                                                                                       | NDC31HJ-151X  | CAPACITOR              | 150pF,50V    |
| R7639                                                                                       | NRVA63D-123X | CMF RESISTOR,C         | 12kΩ,1/16W   | C7623                                                                                       | NDC31HJ-471X  | CAPACITOR              | 470pF,50V    |
| R7640                                                                                       | NRVA63D-123X | CMF RESISTOR,C         | 12kΩ,1/16W   | C7625                                                                                       | NCB21AK-105X  | CAPACITOR              | 1μF,10V      |
| R7641                                                                                       | NRVA63D-123X | CMF RESISTOR,C         | 12kΩ,1/16W   | C7626                                                                                       | NDC31HJ-390X  | CAPACITOR              | 39pF,50V     |
| R7642                                                                                       | NRVA63D-123X | CMF RESISTOR,C         | 12kΩ,1/16W   | C7627                                                                                       | NCB31CK-104X  | CAPACITOR              | 0.1μF,16V    |
| R7643                                                                                       | NRSA63J-220X | MG RESISTOR,C          | 22Ω,1/16W    | C7628                                                                                       | NCF31AZ-105X  | CAPACITOR              | 1μF,10V      |
| R7645                                                                                       | NRSA63J-473X | MG RESISTOR,C          | 47kΩ,1/16W   | C7629                                                                                       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| R7646                                                                                       | NRSA63J-103X | MG RESISTOR,C          | 10kΩ,1/16W   | C7630                                                                                       | NCB31CK-104X  | CAPACITOR              | 0.1μF,16V    |
| R7649                                                                                       | NRVA63D-222X | CMF RESISTOR           | 2.2kΩ,1/16W  | C7631                                                                                       | NCF31AZ-105X  | CAPACITOR              | 1μF,10V      |
| R7650                                                                                       | NRVA63D-222X | CMF RESISTOR           | 2.2kΩ,1/16W  | C7632                                                                                       | NCF31AZ-105X  | CAPACITOR              | 1μF,10V      |
| R7651                                                                                       | NRVA63D-222X | CMF RESISTOR           | 2.2kΩ,1/16W  | C7636                                                                                       | NCB31HK-102X  | CAPACITOR              | 0.001μF,50V  |
| R7652                                                                                       | NRVA63D-222X | CMF RESISTOR           | 2.2kΩ,1/16W  | C7637                                                                                       | NCB31HK-102X  | CAPACITOR              | 0.001μF,50V  |
| R7653                                                                                       | NRVA63D-222X | CMF RESISTOR           | 2.2kΩ,1/16W  | C7638                                                                                       | NCF31CZ-104X  | CAPACITOR              | 0.1μF,16V    |
| R7654                                                                                       | NRVA63D-222X | CMF RESISTOR           | 2.2kΩ,1/16W  | C7639                                                                                       | NCF31CZ-104X  | CAPACITOR,C            | 0.1μF,16V    |
| R7657                                                                                       | NRSA63J-154X | MG RESISTOR            | 150kΩ,1/16W  | C7640                                                                                       | NBE21AM-475X  | T CAPACITOR            | 4.7μF,10V    |
| R7659                                                                                       | NRSA63J-335X | MG RESISTOR            | 3.3MΩ,1/16W  | C7641                                                                                       | NBE21AM-475X  | T CAPACITOR            | 4.7μF,10V    |
| R7660                                                                                       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W   | C7642                                                                                       | NBE21AM-475X  | T CAPACITOR            | 4.7μF,10V    |
| R7661                                                                                       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W   | C7646                                                                                       | NBE21AM-335X  | T CAPACITOR            | 3.3μF,10V    |
| R7662                                                                                       | NRSA63J-681X | MG RESISTOR            | 680Ω,1/16W   | C7647                                                                                       | NBP21DM-335X  | T CAPACITOR            | 3.3μF,20V    |
| R7663                                                                                       | NRSA63J-561X | MG RESISTOR            | 560Ω,1/16W   | C7648                                                                                       | NCF31CZ-104X  | CAPACITOR,C            | 0.1μF,16V    |
| R7664                                                                                       | NRSA63J-332X | MG RESISTOR,C          | 3.3kΩ,1/16W  | C7649                                                                                       | NCF31CZ-104X  | CAPACITOR,C            | 0.1μF,16V    |
|                                                                                             | NRSA63J-823X | MG RESISTOR,A,B        | 82kΩ,1/16W   | C7650                                                                                       | NBP41EM-475X  | T CAPACITOR            | 4.7μF,25V    |
| R7665                                                                                       | NRSA63J-333X | MG RESISTOR            | 33kΩ,1/16W   | C7652                                                                                       | NBE20JM-106X  | T CAPACITOR            | 10μF,6.3V    |
| R7666                                                                                       | NRSA63J-223X | MG RESISTOR            | 22kΩ,1/16W   | C7653                                                                                       | NBE20JM-475X  | T CAPACITOR            | 4.7μF,6.3V   |
| R7672                                                                                       | NRSA63J-0R0X | MG RESISTOR,A,B        | 0Ω,1/16W     | C7654                                                                                       | NBP41EM-475X  | T CAPACITOR            | 4.7μF,25V    |
| R7673                                                                                       | NRSA63J-223X | MG RESISTOR,C          | 22kΩ,1/16W   | C7655                                                                                       | NCB31CK-104X  | CAPACITOR,C            | 0.1μF,16V    |
| R7674                                                                                       | NRSA63J-333X | MG RESISTOR,C          | 33kΩ,1/16W   | C7656                                                                                       | NCF31AZ-105X  | CAPACITOR              | 1μF,10V      |
| R7675                                                                                       | NRSA63J-103X | MG RESISTOR,A,B        | 10kΩ,1/16W   | L7501                                                                                       | NQLZ010-680X  | COIL                   | 68μH         |
| R7677                                                                                       | NRSA63J-223X | MG RESISTOR,C          | 22kΩ,1/16W   | L7502                                                                                       | NQLZ010-220X  | COIL                   | 22μH         |
| R7678                                                                                       | NRSA63J-223X | MG RESISTOR,C          | 22kΩ,1/16W   | L7603                                                                                       | NQL144K-220X  | COIL                   | 22μH         |
| R7679                                                                                       | NRSA63J-822X | MG RESISTOR,C          | 8.2kΩ,1/16W  | L7604                                                                                       | NQL144K-220X  | COIL                   | 22μH         |
| R7681                                                                                       | NRSA63J-0R0X | MG RESISTOR,A,B        | 0Ω,1/16W     | L7605                                                                                       | NQL144K-220X  | COIL                   | 22μH         |
|                                                                                             | NRSA63J-331X | MG RESISTOR,C          | 330Ω,1/16W   | L7606                                                                                       | NQL184J-470X  | COIL                   | 47μH         |
| R7683                                                                                       | NRSA63J-0R0X | MG RESISTOR            | 0Ω,1/16W     | L7607                                                                                       | NQL144K-220X  | COIL                   | 22μH         |
| R7685                                                                                       | NRSA63J-392X | MG RESISTOR,C          | 3.9kΩ,1/16W  | L7608                                                                                       | NQL144K-220X  | COIL,C                 | 22μH         |
| C7501                                                                                       | NCZ1016-150X | CAPACITOR              | 15pF,2kV     | L7609                                                                                       | NQL144K-220X  | COIL                   | 22μH         |
| C7502                                                                                       | NCZ1016-150X | CAPACITOR,A,B          | 15pF,2kV     | L7610                                                                                       | NQL144K-220X  | COIL                   | 22μH         |
|                                                                                             | NCZ1016-180X | CAPACITOR,C            | 18pF,2kV     | L7611                                                                                       | NQL144K-220X  | COIL,A,B               | 22μH         |
| C7503                                                                                       | NFV41HJ-273X | MPPS CAPACITOR         | 0.027μF,50V  |  T7501   | NQS0037-001X  | SW TRANSF              |              |
| C7504                                                                                       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   | CN7501                                                                                      | QGF0506F1-38X | FPC CONNECTOR          |              |
| C7505                                                                                       | NBE40JM-476X | T CAPACITOR            | 47μF,6.3V    | CN7502                                                                                      | QGF0501F1-24X | FPC CONNECTOR          |              |
| C7506                                                                                       | NCB31EK-103X | CAPACITOR              | 0.01μF,25V   | CN7503                                                                                      | QGA5002F1-02X | CONNECTOR              |              |
| C7507                                                                                       | NDC31HJ-151X | CAPACITOR              | 150pF,50V    | OT1                                                                                         | LY41547-001A  | EARTH PLATE(1)         |              |
| C7508                                                                                       | NCB11CK-105X | CAPACITOR              | 1μF,16V      | OT2                                                                                         | LY40559-001A  | SHIELD SHEET           |              |
| C7509                                                                                       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | OT3                                                                                         | LY41729-001A  | SHIELD SHEET           |              |
| C7510                                                                                       | NCB31HK-562X | CAPACITOR              | 0.0056μF,50V | OT4                                                                                         | LY30016-0W1A  | SPACER-A,A,B           |              |
| C7601                                                                                       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    | *****                                                                                       |               |                        |              |
| C7602                                                                                       | NBE40JM-226X | T CAPACITOR            | 22μF,6.3V    |                                                                                             |               |                        |              |
| C7603                                                                                       | NBE20JM-106X | T CAPACITOR            | 10μF,6.3V    |                                                                                             |               |                        |              |
| C7604                                                                                       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    |                                                                                             |               |                        |              |
| C7605                                                                                       | NCB31CK-104X | CAPACITOR              | 0.1μF,16V    |                                                                                             |               |                        |              |
| C7606                                                                                       | NCB11CK-225X | CAPACITOR              | 2.2μF,16V    |                                                                                             |               |                        |              |
| C7607                                                                                       | NCF31CZ-104X | CAPACITOR              | 0.1μF,16V    |                                                                                             |               |                        |              |
| C7608                                                                                       | NCB11CK-225X | CAPACITOR              | 2.2μF,16V    |                                                                                             |               |                        |              |
| C7609                                                                                       | NCB11CK-225X | CAPACITOR              | 2.2μF,16V    |                                                                                             |               |                        |              |
| C7610                                                                                       | NBP41CM-226X | T CAPACITOR            | 22μF,16V     |                                                                                             |               |                        |              |

**ZOOM UNIT <08>**

PW LY20457-001A ZOOM UNIT

| # △ REF No. | PART No. | PART NAME, DESCRIPTION |
|-------------|----------|------------------------|
| *****       |          |                        |

OPE.COVER UNIT <09>

|    |              |                    |
|----|--------------|--------------------|
| PW | LY10176-001B | OPE.COVER UNIT,B,C |
|    | LY10176-002B | OPE.COVER UNIT,A   |

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B/W VF BOARD ASSEMBLY(DVF11U/DVF21U) <10>

|        |                |                           |
|--------|----------------|---------------------------|
| PW     | YB20861A-01    | B/W VF BOARD ASSY         |
| IC7001 | PCVVQ110AFB    | IC                        |
| Q7001  | 2SD2216J/QR/-X | TRANSISTOR                |
| D7002  | MA111          | DIODE                     |
| D7003  | MA111          | DIODE                     |
| R7001  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7002  | NRSA63J-271X   | MG RESISTOR 270Ω,1/16W    |
| R7003  | NDC31HJ-181X   | CAPACITOR 180pF,50V       |
| R7004  | NRSA63J-104X   | MG RESISTOR 100kΩ,1/16W   |
| R7005  | NRSA63J-182X   | MG RESISTOR 1.8kΩ,1/16W   |
| R7006  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7007  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7009  | NRSA63J-183X   | MG RESISTOR 18kΩ,1/16W    |
| R7010  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7011  | NRSA63J-103X   | MG RESISTOR 10kΩ,1/16W    |
| R7012  | NRVA63D-223X   | CMF RESISTOR 22kΩ,1/16W   |
| R7013  | NRVA63D-103X   | CMF RESISTOR 10kΩ,1/16W   |
| R7014  | NRVA63D-680X   | CMF RESISTOR 68Ω,1/16W    |
| R7016  | NRSA63J-563X   | MG RESISTOR 56kΩ,1/16W    |
| R7019  | NRSA63J-153X   | MG RESISTOR 15kΩ,1/16W    |
| R7020  | NRSA63J-153X   | MG RESISTOR 15kΩ,1/16W    |
| R7022  | NRSA63J-222X   | MG RESISTOR 2.2kΩ,1/16W   |
| R7027  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7029  | NRSA63J-153X   | MG RESISTOR 15kΩ,1/16W    |
| R7033  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7034  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7035  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7036  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| R7040  | NRSA63J-0R0X   | MG RESISTOR 0Ω,1/16W      |
| VR7001 | NVP0016-223X   | TRIM RESISTOR,GAIN        |
| VR7002 | NVP0016-223X   | TRIM RESISTOR,BLACK LEVEL |
| C7001  | NCB21CK-104X   | CAPACITOR 0.1μF,16V       |
| C7002  | NCF31CZ-104X   | CAPACITOR 0.1μF,16V       |
| C7003  | NBE20JM-475X   | T CAPACITOR 4.7μF,6.3V    |
| C7004  | NCB21HK-122X   | CAPACITOR 0.0012μF,50V    |
| C7005  | NCB31EK-103X   | CAPACITOR 0.01μF,25V      |
| C7006  | NCF21CZ-105X   | CAPACITOR 1μF,16V         |
| C7007  | NCF31CZ-104X   | CAPACITOR 0.1μF,16V       |
| C7008  | NCF31CZ-104X   | CAPACITOR 0.1μF,16V       |
| C7009  | NCF31CZ-104X   | CAPACITOR 0.1μF,16V       |
| C7010  | NCF31CZ-104X   | CAPACITOR 0.1μF,16V       |
| C7011  | NCB31HK-102X   | CAPACITOR 0.001μF,50V     |
| C7012  | NCF21CZ-105X   | CAPACITOR 1μF,16V         |
| C7013  | NCB31EK-103X   | CAPACITOR 0.01μF,25V      |
| C7014  | NCB31EK-103X   | CAPACITOR 0.01μF,25V      |
| C7015  | NCF31CZ-104X   | CAPACITOR 0.1μF,16V       |
| C7018  | NBE20JM-106X   | T CAPACITOR 10μF,6.3V     |
| C7019  | NCF31CZ-104X   | CAPACITOR 0.1μF,16V       |

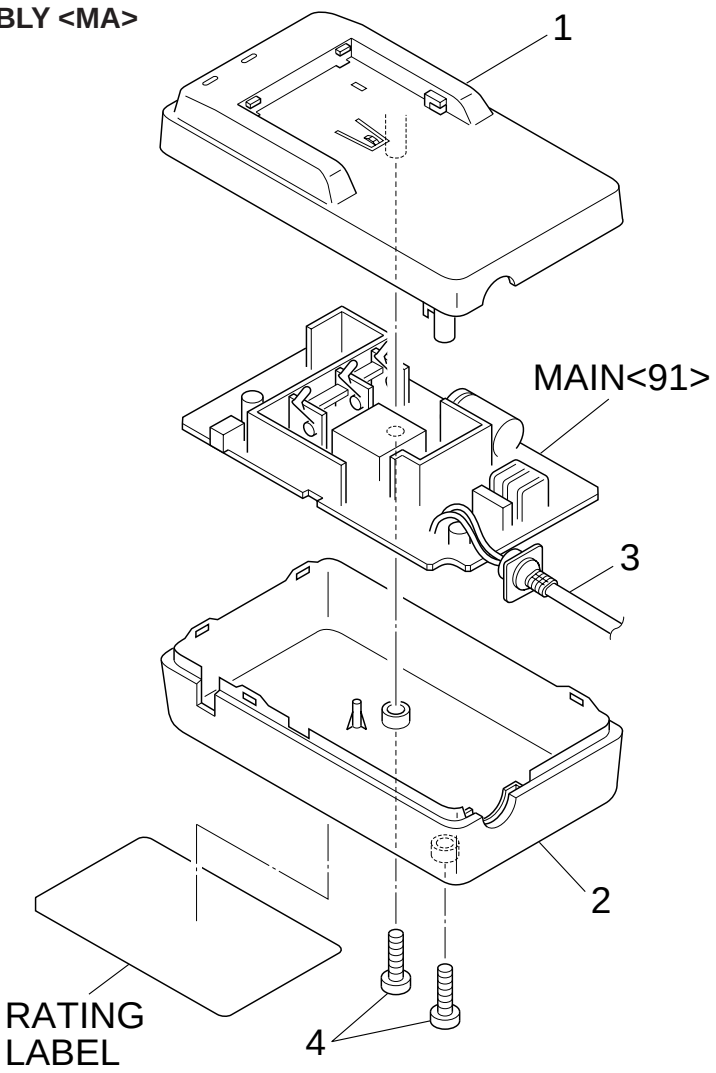
| # △ REF No. | PART No.      | PART NAME, DESCRIPTION |
|-------------|---------------|------------------------|
| C7021       | NCB31EK-103X  | CAPACITOR 0.01μF,25V   |
| C7023       | NCF31CZ-104X  | CAPACITOR 0.1μF,16V    |
| C7024       | NBE20JM-106X  | T CAPACITOR 10μF,6.3V  |
| C7025       | NEA71CM-107X  | E CAPACITOR 100μF,16V  |
| L7001       | NQL144K-100X  | COIL 10μH              |
| L7002       | NQL144K-100X  | COIL 10μH              |
| L7003       | NQL144K-220X  | COIL 22μH              |
| CN7001      | QGF0503C1-10V | FFC/FPC CONNECTOR      |
| CN7002      | QGF0503C1-20X | FFC/FPC CONNECTOR      |
| CN7003      | QGA1201C2-02X | CONNECTOR              |
| OT1         | PU59915-105   | SPACER                 |

SECTION 6  
AC POWER ADAPTER (AA-V20U)

SAFETY PRECAUTION

Parts identified by the ⚠ symbol are critical for safety. Replace only with specified part numbers.

6.1 CABINET ASSEMBLY <MA>



| #     | ⚠ REF No. | PART No. | PART NAME, DESCRIPTION |
|-------|-----------|----------|------------------------|
| ***** |           |          |                        |

CABINET ASSEMBLY <MA>

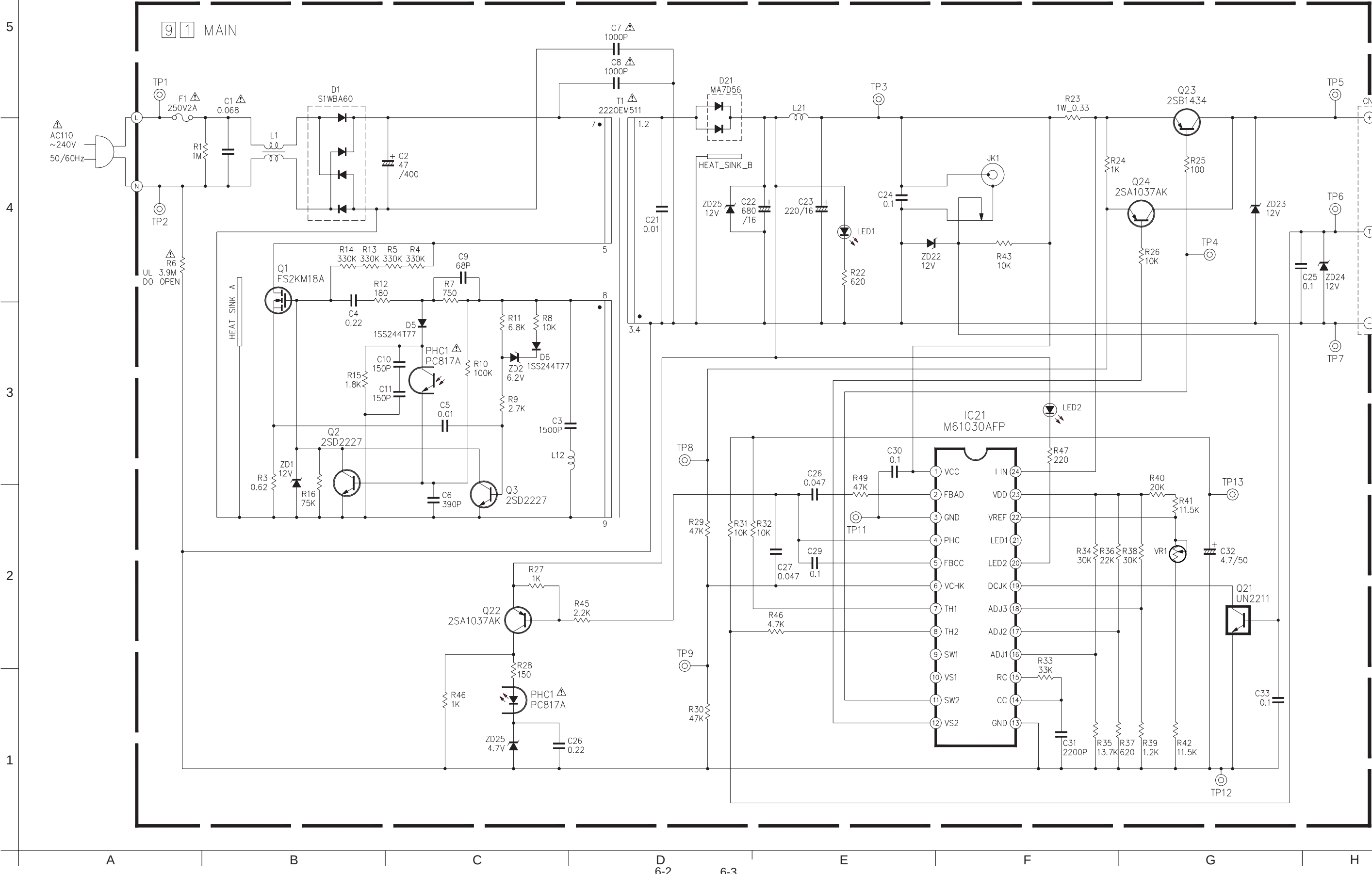
|     |              |               |
|-----|--------------|---------------|
| 1   | PTY20483-011 | UPPER CASE    |
| 2   | PTY20483-021 | LOWER CASE    |
| ⚠ 3 | PTY20483-035 | AC POWER CORD |
| 4   | YQ10531-011  | TAP SCREW     |

## 6.2 SCHEMATIC DIAGRAM

**NOTE:** When ordering parts, be sure to order according to the Part Number indicated in the Parts List.

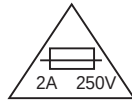
## Safety precautions

The components identified by the symbol  are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.



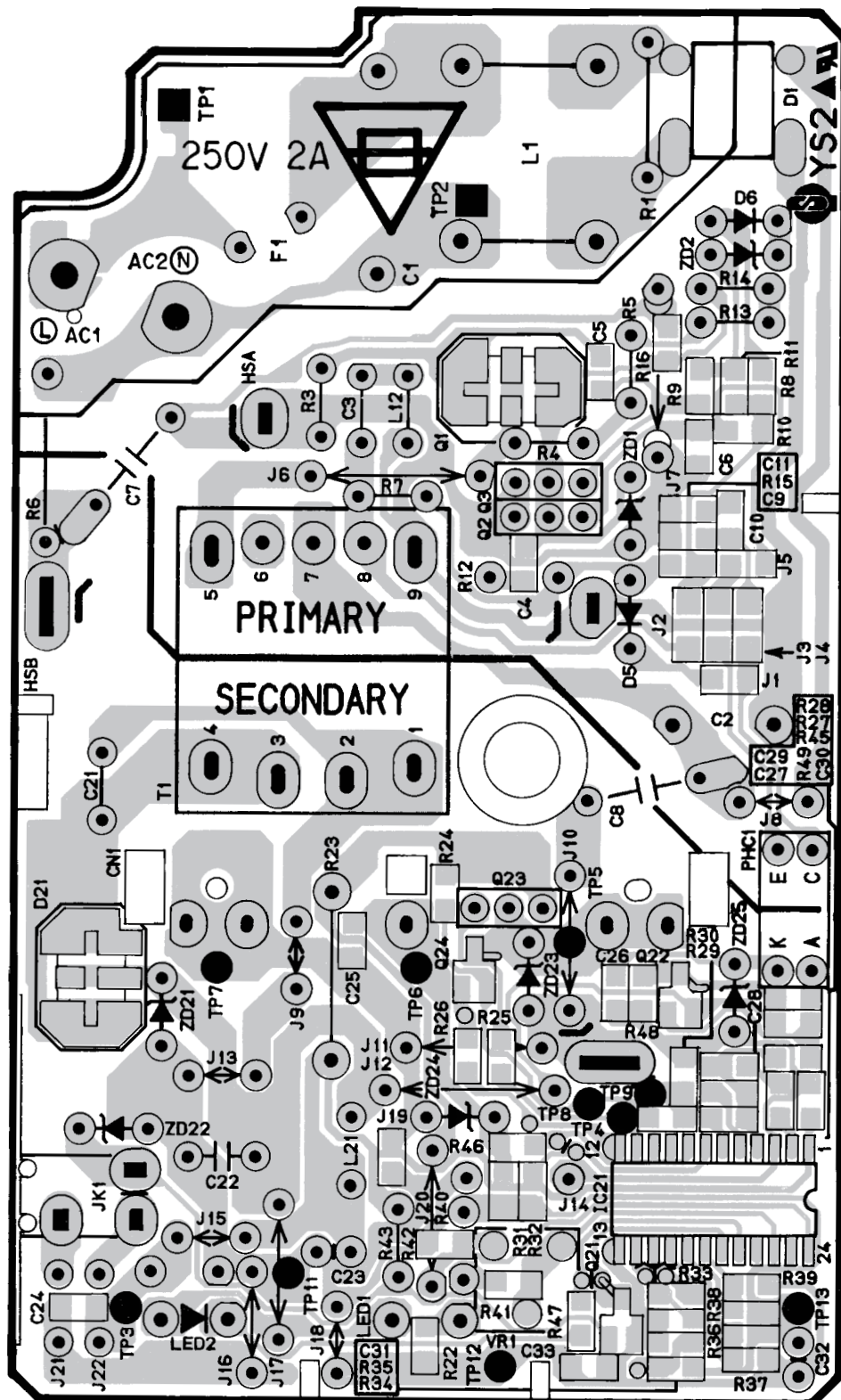


## 6.3 CIRCUIT BOARD



CAUTION:  
FOR CONTINUED PROTECTION AGAINST  
FIRE HAZARD, REPLACE ONLY WITH SAME  
TYPE AND RATED FUSE.

ATTENTION:  
POUR UNE PROTECTION PERMANENTE  
CONTRE LES RISQUE D'INCENDE,  
REEMPLACER LE FUSIBLE PAR UN AUTRE  
DE MEME TYPE ET DE MEME TENSION.



6.4 ELECTRICAL PARTS LIST

| #                        | △ REF No. | PART No.        | PART NAME, DESCRIPTION      |
|--------------------------|-----------|-----------------|-----------------------------|
| *****                    |           |                 |                             |
| MAIN BOARD ASSEMBLY <91> |           |                 |                             |
| △                        | PW1       | PTY20483-051    | MAIN BOARD ASS'Y            |
|                          |           | PTY20483-081    | TERMINAL HOLDER             |
|                          |           | PTY20483-082    | TERMINAL A                  |
|                          |           | PTY20483-083    | TERMINAL B                  |
|                          | HS A      | PTY20483-071    | HEAT SINK A                 |
|                          | HS B      | PTY20483-072    | HEAT SINK B                 |
|                          |           | PTY10067-551    | TAP SCREW                   |
|                          | IC21      | M61030AFP       | CHARGE CONTROL IC 24pin SOP |
|                          | Q1        | FS2KM18A        | MOS FET                     |
|                          | Q2        | 2SD2227         | TRANSISTER                  |
|                          | Q3        | 2SD2227         | TRANSISTER                  |
|                          | Q21       | UN2211TX        | DIG.TRANSISTER              |
|                          | Q22       | 2SA1037AK/QR/-X | CHIP TRANSISTOR             |
|                          | Q23       | 2SB1434         | TRANSISTOR                  |
|                          | Q24       | 2SA1037AK/QR/-X | CHIP TRANSISTOR             |
|                          | D1        | S1WBA60         | B. DIODE 600V 1A            |
|                          | D5        | 1SS244T77       | DIODE 200V 6A               |
|                          | D6        | 1SS244T77       | DIODE 200V 6A               |
|                          | D21       | MA7D56          | DIODE 60V 10A               |
|                          | ZD1       | MTZJ12C-T2      | ZENER DIODE 12V             |
|                          | ZD2       | MTZJ6.2B-T2     | ZENER DIODE 6.2V 500mW      |
|                          | ZD21      | MTZJ12C-T2      | ZENER DIODE 12V             |
|                          | ZD22      | MTZJ12C-T2      | ZENER DIODE 12V             |
|                          | ZD23      | MTZJ12C-T2      | ZENER DIODE 12V             |
|                          | ZD24      | MTZJ12C-T2      | ZENER DIODE 12V             |
|                          | ZD25      | MA4047NM        | ZENER DIODE 4.7V 500mW      |
|                          | LED1      | YQ10531-540     | LED RED POWER               |
|                          | LED2      | YQ10531-542     | LED GREEN CHARGE            |
|                          | R1        | QRN141J-105     | RESISTOR 1MΩ 1/4W           |
|                          | R3        | PTY10067-601    | MF RESISTER 0.62Ω 1W        |
|                          | R4        | QRE141J-334Y    | RESISTOR 330kΩ 1/4W         |
|                          | R5        | QRE141J-334Y    | RESISTOR 330kΩ 1/4W         |
| △                        | R6        | PTY10067-603    | RESISTOR 3.9MΩ 1/2W         |
|                          | R7        | QRE141J-751Y    | RESISTOR 750Ω 1/4W          |
|                          | R8        | NRSA02J-103X    | CHIP RESISTOR 10kΩ 1/10W    |
|                          | R9        | NRSA02J-272X    | CHIP RESISTOR 2.7kΩ 1/10W   |
|                          | R10       | NRSA02J-104X    | CHIP RESISTOR 100kΩ 1/10W   |
|                          | R11       | NRSA02J-682X    | CHIP RESISTOR 6.8kΩ 1/10W   |
|                          | R12       | QRE141J-181Y    | RESISTOR 180Ω 1/4W          |
|                          | R13       | QRE141J-334Y    | RESISTOR 330kΩ 1/4W         |
|                          | R14       | QRE141J-334Y    | RESISTOR 330kΩ 1/4W         |
|                          | R15       | NRSA02J-182X    | CHIP RESISTOR 1.8kΩ 1/10W   |
|                          | R16       | NRSA02J-753X    | CHIP RESISTOR 75kΩ 1/10W    |
|                          | R22       | NRSA02J-621X    | CHIP RESISTOR 620Ω 1/10W    |
|                          | R23       | QRZ0192-R33X    | RESISTOR 0.33Ω 1W           |
|                          | R24       | NRSA02J-102X    | CHIP RESISTOR 1kΩ 1/10W     |
|                          | R25       | NRSA02J-101X    | CHIP RESISTOR 100Ω 1/10W    |

| # | △ REF No. | PART No.      | PART NAME, DESCRIPTION      |
|---|-----------|---------------|-----------------------------|
|   | R26       | NRSA02J-103X  | CHIP RESISTOR 10kΩ 1/10W    |
|   | R27       | NRSA02J-102X  | CHIP RESISTOR 1kΩ 1/10W     |
|   | R28       | NRSA02J-151X  | CHIP RESISTOR 150Ω 1/10W    |
|   | R29       | NRSA02F-473X  | CHIP RESISTOR 47.0kΩ 1/10W  |
|   | R30       | NRSA02F-473X  | CHIP RESISTOR 47.0kΩ 1/10W  |
|   | R31       | NRSA02F-103X  | CHIP RESISTOR 10.0kΩ 1/10W  |
|   | R32       | NRSA02J-103X  | CHIP RESISTOR 10kΩ 1/10W    |
|   | R33       | NRSA02J-333X  | CHIP RESISTOR 33kΩ 1/10W    |
|   | R34       | NRSA02F-303X  | CHIP RESISTOR 30.0kΩ 1/10W  |
|   | R35       | NRSA02F-1372X | CHIP RESISTOR 13.7kΩ 1/10W  |
|   | R36       | NRSA02J-223X  | CHIP RESISTOR 22kΩ 1/10W    |
|   | R37       | NRSA02J-621X  | CHIP RESISTOR 620Ω 1/10W    |
|   | R38       | NRSA02J-303X  | CHIP RESISTOR 30kΩ 1/10W    |
|   | R39       | NRSA02J-122X  | CHIP RESISTOR 1.2kΩ 1/10W   |
|   | R40       | PTY20450-200  | RESISTOR 20.0kΩ 1/4W        |
|   | R41       | NRSA02F-1152X | CHIP RESISTOR 11.5kΩ 1/10W  |
|   | R42       | NRSA02F-1152X | CHIP RESISTOR 11.5kΩ 1/10W  |
|   | R43       | QRE141J-103Y  | RESISTOR 10kΩ 1/4W          |
|   | R45       | NRSA02J-222X  | CHIP RESISTOR 2.2kΩ 1/10W   |
|   | R46       | NRSA02J-472X  | CHIP RESISTOR 4.7kΩ 1/10W   |
|   | R47       | NRSA02J-221X  | CHIP RESISTOR 220Ω 1/10W    |
|   | R48       | NRSA02J-102X  | CHIP RESISTOR 1kΩ 1/10W     |
|   | R49       | NRSA02J-473X  | CHIP RESISTOR 47kΩ 1/10W    |
| △ | C1        | QFZ9072-683   | F. CAPACITOR 0.068μF 275V   |
|   | C2        | YQ10626-402   | E CAPACITOR 47μF 400V       |
|   | C3        | PTY10067-651  | CAPACITOR 1500pF 250V       |
|   | C4        | NCB21CK-224X  | CHIP CAPACITOR 0.22μF 16V   |
|   | C5        | PTY10067-653  | CAPACITOR 0.01μF 50V        |
|   | C6        | NCB21HK-391X  | CHIP CAPACITOR 390pF 50V    |
| △ | C7        | PTY10067-655  | CAPACITOR 1000pF 250V       |
| △ | C8        | PTY10067-655  | CAPACITOR 1000pF 250V       |
|   | C9        | NDC21HJ-680X  | CHIP CAPACITOR 68pF 50V     |
|   | C10       | NDC21HJ-151X  | CHIP CAPACITOR 150pF 50V    |
|   | C11       | NDC21HJ-151X  | CHIP CAPACITOR 150pF 50V    |
|   | C21       | PTY10067-657  | CAPACITOR 0.01μF 250V       |
|   | C22       | PTY20292-321  | E CAPACITOR 680μF 16V       |
|   | C23       | QETL1CM-227   | E CAPACITOR 220μF 16V       |
|   | C24       | NCF21EZ-104X  | CHIP CAPACITOR 0.1μF 25V    |
|   | C25       | NCF21EZ-104X  | CHIP CAPACITOR 0.1μF 25V    |
|   | C26       | NCB21CK-224X  | CHIP CAPACITOR 0.22μF 16V   |
|   | C27       | NCB21EK-473X  | CHIP CAPACITOR 0.047μF 25V  |
|   | C28       | NCB21HK-473X  | CHIP CAPACITOR 0.047μF 50V  |
|   | C29       | NCB21EK-104X  | CHIP CAPACITOR 0.1μF 25V    |
|   | C30       | NCF21EZ-104X  | CHIP CAPACITOR 0.1μF 25V    |
|   | C31       | NCB21HK-222X  | CHIP CAPACITOR 0.0022μF 50V |
|   | C32       | QEHA1HM-475   | E CAPACITOR 4.7μF 50V       |
|   | C33       | NCF21EZ-104X  | CHIP CAPACITOR 0.1μF 25V    |
| △ | T1        | PTY20080-541  | SW TRANS                    |
|   | VR1       | PTY20483-101  | VOLUME 2kΩ                  |
| △ | F1        | PTY20450-40   | FUSE 2A 250V                |
|   | JK1       | YQ21032-301   | DC JACK                     |
|   | L1        | PTY10067-701  | LINE FILTER                 |
|   | L2        | PTY10067-702  | BEAD INDUCTOR               |
|   | L21       | PTY20080-533  | COIL                        |
| △ | PHC1      | PC817A        | PHOTO COUPLER               |
|   |           | or PC817X1    | PHOTO COUPLER               |

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# JVC

S40895-02

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The following table lists the differing points between Models GR-DVF11U, GR-DVF21U and GR-DVF31U in this series.

|                          | GR-DVF11U | GR-DVF21U | GR-DVF31U |
|--------------------------|-----------|-----------|-----------|
| VIEW FINDER              | B/W       | B/W       | COLOR     |
| LCD MONITOR              | 2.5INCH   | 2.5INCH   | 3INCH     |
| BUILT IN VIDE AUTO LIGHT | NOT USED  | USED      | USED      |
| DIGITAL STILL PICTURE    | NOT USED  | USED      | USED      |
| PC TERMINAL              | NOT USED  | USED      | USED      |
| REMOTE CONTROL           | OPTIONAL  | PROVIDED  | PROVIDED  |
| RCU BATTERY              | NOT USED  | USED      | USED      |
| PC CABLE                 | NOT USED  | USED      | USED      |
| EDITING CABLE            | NOT USED  | USED      | USED      |
| SOFT WEAR                | NOT USED  | USED      | USED      |

# Important Safety Precautions

Prior to shipment from the factory, JVC products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

## ●Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the  $\triangle$  symbol and shaded (■) parts are critical for safety.

Replace only with specified part numbers.

**Note: Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.**

3. Fuse replacement caution notice.  
Caution for continued protection against fire hazard.  
Replace only with same type and rated fuse(s) as specified.

4. Use specified internal wiring. Note especially:

- 1) Wires covered with PVC tubing
- 2) Double insulated wires
- 3) High voltage leads

5. Use specified insulating materials for hazardous live parts. Note especially:

- |                    |                                      |            |
|--------------------|--------------------------------------|------------|
| 1) Insulation Tape | 3) Spacers                           | 5) Barrier |
| 2) PVC tubing      | 4) Insulation sheets for transistors |            |

6. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering.

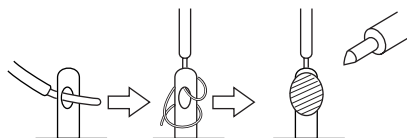


Fig.1

7. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.)

8. Check that replaced wires do not contact sharp edged or pointed parts.

9. When a power cord has been replaced, check that 10-15 kg of force in any direction will not loosen it.

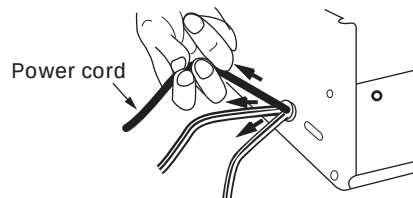


Fig.2

10. Also check areas surrounding repaired locations.

11. Products using cathode ray tubes (CRTs)  
In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the specified parts. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

12. Crimp type wire connector

In such cases as when replacing the power transformer in sets where the connections between the power cord and power transformer primary lead wires are performed using crimp type connectors, if replacing the connectors is unavoidable, in order to prevent safety hazards, perform carefully and precisely according to the following steps.

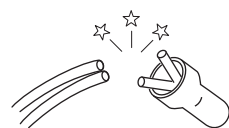
1) **Connector part number** : E03830-001

2) **Required tool** : Connector crimping tool of the proper type which will not damage insulated parts.

3) **Replacement procedure**

(1) Remove the old connector by cutting the wires at a point close to the connector.

Important : Do not reuse a connector (discard it).



cut close to connector

Fig.3

(2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

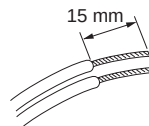


Fig.4

(3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

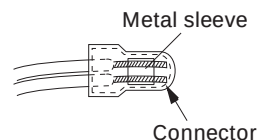


Fig.5

(4) As shown in Fig.6, use the crimping tool to crimp the metal sleeve at the center position. Be sure to crimp fully to the complete closure of the tool.

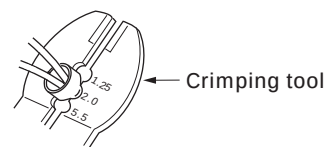


Fig.6

(5) Check the four points noted in Fig.7.

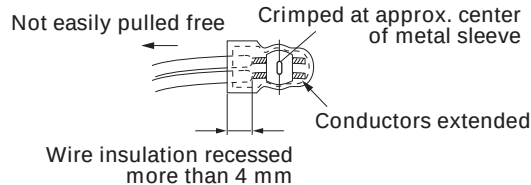


Fig.7



## ● Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

### 1. Insulation resistance test

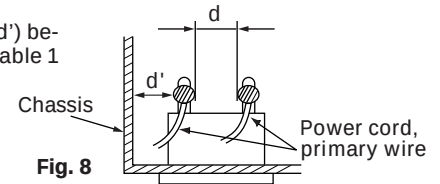
Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

### 2. Dielectric strength test

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table 1 below.

### 3. Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table 1 below.

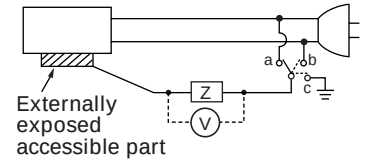


### 4. Leakage current test

Confirm specified or lower leakage current between earth ground/power cord plug prongs and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

**Measuring Method :** (Power ON)

Insert load Z between earth ground/power cord plug prongs and externally exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure 9 and following table 2.

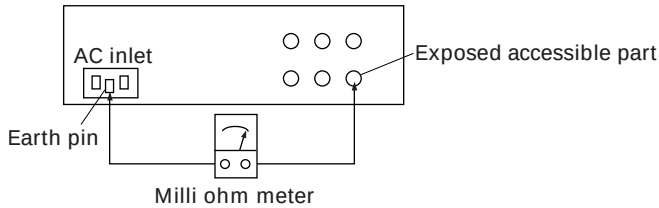


### 5. Grounding (Class I model only)

Confirm specified or lower grounding impedance between earth pin in AC inlet and externally exposed accessible parts (Video in, Video out, Audio in, Audio out or Fixing screw etc.).

**Measuring Method:**

Connect milli ohm meter between earth pin in AC inlet and exposed accessible parts. See figure 10 and grounding specifications.



#### Grounding Specifications

| Region             | Grounding Impedance (Z)  |
|--------------------|--------------------------|
| USA & Canada       | $Z \leq 0.1 \text{ ohm}$ |
| Europe & Australia | $Z \leq 0.5 \text{ ohm}$ |

| AC Line Voltage              | Region             | Insulation Resistance (R)                                           | Dielectric Strength                                         | Clearance Distance (d), (d')                                                                          |
|------------------------------|--------------------|---------------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| 100 V                        | Japan              | $R \geq 1 \text{ M}\Omega/500 \text{ V DC}$                         | AC 1 kV 1 minute                                            | $d, d' \geq 3 \text{ mm}$                                                                             |
| 100 to 240 V                 |                    |                                                                     | AC 1.5 kV 1 minute                                          | $d, d' \geq 4 \text{ mm}$                                                                             |
| 110 to 130 V                 | USA & Canada       | $1 \text{ M}\Omega \leq R \leq 12 \text{ M}\Omega/500 \text{ V DC}$ | AC 1 kV 1 minute                                            | $d, d' \geq 3.2 \text{ mm}$                                                                           |
| 110 to 130 V<br>200 to 240 V | Europe & Australia | $R \geq 10 \text{ M}\Omega/500 \text{ V DC}$                        | AC 3 kV 1 minute (Class II)<br>AC 1.5 kV 1 minute (Class I) | $d \geq 4 \text{ mm}$<br>$d' \geq 8 \text{ mm}$ (Power cord)<br>$d' \geq 6 \text{ mm}$ (Primary wire) |

Table 1 Specifications for each region

| AC Line Voltage              | Region             | Load Z                                                    | Leakage Current (i)                                      | a, b, c                  |
|------------------------------|--------------------|-----------------------------------------------------------|----------------------------------------------------------|--------------------------|
| 100 V                        | Japan              | $1 \text{ k}\Omega$                                       | $i \leq 1 \text{ mA rms}$                                | Exposed accessible parts |
| 110 to 130 V                 | USA & Canada       | $0.15 \mu\text{F}$ in parallel with $1.5 \text{ k}\Omega$ | $i \leq 0.5 \text{ mA rms}$                              | Exposed accessible parts |
| 110 to 130 V<br>220 to 240 V | Europe & Australia | $2 \text{ k}\Omega$                                       | $i \leq 0.7 \text{ mA peak}$<br>$i \leq 2 \text{ mA dc}$ | Antenna earth terminals  |
|                              |                    | $50 \text{ k}\Omega$                                      | $i \leq 0.7 \text{ mA peak}$<br>$i \leq 2 \text{ mA dc}$ | Other terminals          |

Table 2 Leakage current specifications for each region

**Note:** These tables are unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

# SECTION 1 DISASSEMBLY

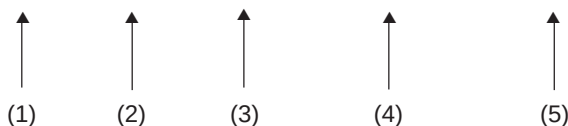
## 1.1 BEFORE ASSEMBLY AND DISASSEMBLY

### 1.1.1 Precautions

1. Be sure to remove the power supply unit prior to mounting and soldering of parts.
2. When connecting and disconnecting the connectors, be careful not to damage the wire.
3. When replacing chip parts (especially IC parts), desolder completely first (to prevent peeling of the pattern).
4. Tighten screws properly during the procedures.  
Unless specified otherwise, tighten screws at a torque of 0.2N·m (2.0kgf·cm).

### 1.1.2 Assembly and disassembly

| STEP /LOC NO. | PART          | Fig. No.  | REMOVAL                                  |         |
|---------------|---------------|-----------|------------------------------------------|---------|
|               |               |           | UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER | Note    |
| ①             | UPPER CASE(2) | Fig.1-3-2 | 2(S1), (L1)                              | NOTE1   |
| ②             | UPPER CASE(1) | Fig.1-3-3 | (S1), (L2)                               | NOTE1,2 |
| ③             | TOP COVER     | Fig.1-3-4 | (S1), 2(S2), (L1), (L3), 2(L4)           | NOTE3,4 |



(1) Indicate the disassembly steps. When assembling, perform in the reverse order of these steps. This number corresponds to the number in the disassembly diagram.

(2) Indicates the name of disassembly/assembly parts.

(3) Indicates the number in the disassembly diagram.

(4) Indicates parts and points such as screws, washers, springs which must be removed during disassembly/assembly.

P = Spring  
W = Washer  
S = Screw

Lock (L), soldering (SD), shield, connector, etc.

[Example] • Remove (W1) = Washer W1.  
• Remove (SD1) = Soldering at the point SD1.  
• Connector (A) = Disconnect the connector (A).

(5) Precautions on disassembly/assembly.

### 1.1.3 Disconnection of Connectors (Wires)

#### Connector

Pull both ends of the connector in the arrow direction, remove the lock and disconnect the flat wire.

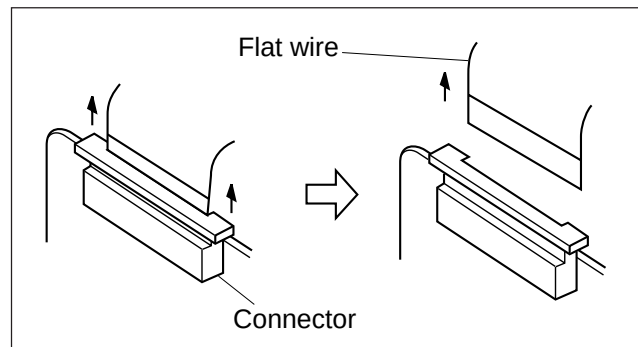


Fig. 1-1-1 Connector 1

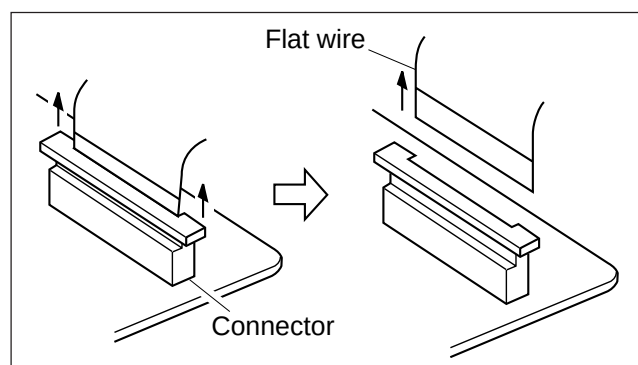


Fig. 1-1-2 Connector 2

Extend the locks in the direction of the arrow for unlocking and then pull out the wire. After removing the wire, immediately restore the locks to their original positions because the locks are apt to come off the connector.

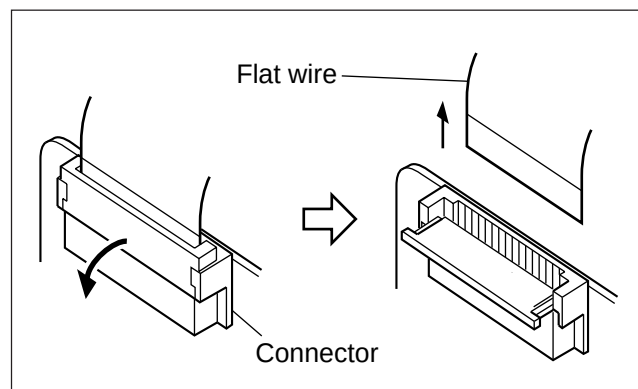


Fig. 1-1-3 Connector 3

### 1.1.4 Main screws to deal with disassembly/assembly

Table 1-1-1 lists screws by their symbols correspond to those shown in figures of this section "Disassembly".

**Note:** Screw that are asterisked (marked with \*) in the shape column are fixed with screw lock agent. If such the screw is once removed, never use it again.

| SYMBOL | SHAPE                                                                                 | PARTS NO.    | COLOR  |
|--------|---------------------------------------------------------------------------------------|--------------|--------|
| (S1)   |      | QYSLSF2055D  | BLACK  |
| (S2)   |      | LY30018-084A | BLACK  |
| (S3)   |      | QYSLSF2090D  | BLACK  |
| (S4)   |      | LY30018-044A | BLACK  |
| (S5)   |      | YQ43762-5    | GOLD   |
| (S6)   |      | LY30018-050A | GOLD   |
| (S7)   |  *   | LY30018-089A | GOLD   |
| (S8)   |      | YQ43893-3    | SILVER |
| (S9)   |      | LY30018-024A | BLACK  |
| (S10)  |      | LY30019-014A | GOLD   |
| (S11)  |      | QYSLSP2030D  | BLACK  |
| (S12)  |      | QYSPSGU2080Z | GOLD   |
| (S13)  |     | PTY30151-016 | SILVER |
| (S14)  |    | QYSLSP2040D  | BLACK  |
| (S15)  |    | QYSPSPT1750D | BLACK  |
| (S16)  |  * | LY30018-038A | BLACK  |
| (S17)  |  * | LY30018-090A | GOLD   |
| (S18)  |    | QYSPSGT1735Z | GOLD   |
| (S19)  |    | LY30018-058A | SILVER |
| (S20)  |    | LY30018-079A | BLACK  |
| (S21)  |    | LY30018-023A | BLACK  |

Table 1-1-1

## 1.2 TOOLS AND EQUIPMENTS REQUIRED FOR ADJUSTMENTS

### 1.2.1 Tools required for adjustments

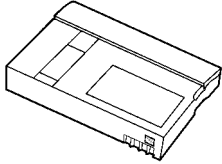
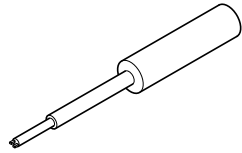
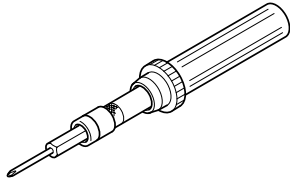
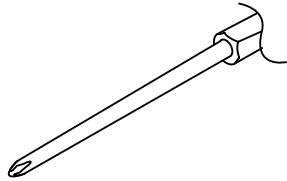
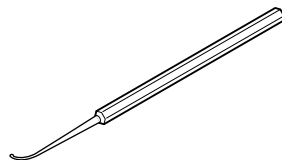
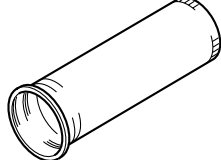
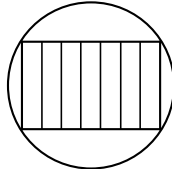
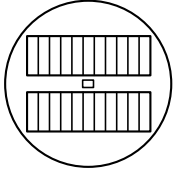
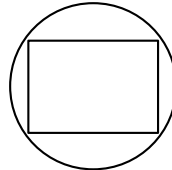
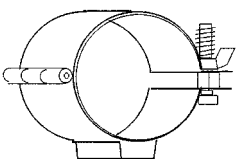
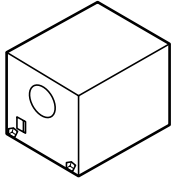
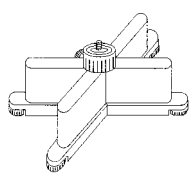
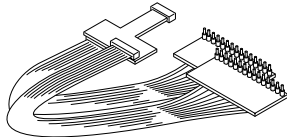
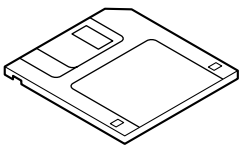
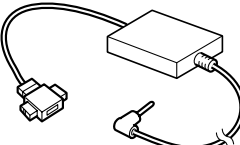
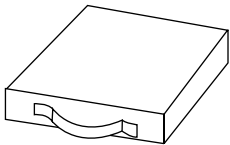
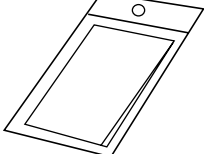
|                                                                                      |                                       |                                                                                       |                                  |
|--------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------|----------------------------------|
| 1                                                                                    | ALIGNMENT TAPE<br>MC-1                | 2                                                                                     | GUIDE DRIVER<br>YTU94148A        |
|    |                                       |    |                                  |
| 3                                                                                    | TORQUE DRIVER<br>YTU94088             | 4                                                                                     | BIT<br>YTU94088-003              |
|    |                                       |    |                                  |
| 5                                                                                    | CHIP IC REPLACEMENT JIG<br>PTS40844-2 | 6                                                                                     | INF ADJUSTMENT LENS<br>YTU92001B |
|    |                                       |    |                                  |
| 7                                                                                    | COLOR BAR CHART<br>YTU92001-051       | 8                                                                                     | GRAY SCALE CHART<br>YTU92001-052 |
|  |                                       |  |                                  |
| 9                                                                                    | WHITE BALANCE CHART<br>YTU92001-053   | 10                                                                                    | INF LENS HOLDER<br>YTU94087      |
|  |                                       |  |                                  |
| 11                                                                                   | LIGHT BOX<br>YTU93072A-1              | 12                                                                                    | CAMERA STAND<br>YTU93079         |
|  |                                       |  |                                  |
| 13                                                                                   | PATCH CORD<br>YTU93099A               | 14                                                                                    | JIG CONNECTOR CABLE<br>YTU93082C |
|  |                                       |  |                                  |

Table 1-2-1

|                                                                                   |                                                                                   |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 15 SERVICE SUPPORT SYSTEM<br>YTU94057-41                                          | 16 PC CABLE<br>QAM0099-002                                                        |
|  |  |
| 17 SOLDERING KIT<br>YTU96016B                                                     | 18 CLEANING CLOTH<br>KSMM-01                                                      |
|  |  |

1. Alignment tape  
To be used for check and adjustment of interchangeability of the mechanism.
2. Guide driver  
To be used to turn the guide roller to adjustment of the linearity of playback envelope.
3. Torque driver  
Be sure to use to fastening the mechanism and exterior parts because those parts must strictly be controlled for tightening torque.
4. Bit  
This bit is slightly longer than those set in conventional torque drivers.
5. Chip IC replacement jig.  
To be used for replacing chip IC"s and other chip parts.
6. INF adjustment lens  
To be used for adjustment of the camera system.
7. Color bar chart  
To be used for adjustment of the camera system.
8. Gray scale chart  
To be used for adjustment of the camera system.
9. White balance chart  
To be used for adjustment of the camera system.  
(for white balance adjustment)
10. INF lens holder  
To be used together with the camera stand (11) for operating the VideoMovie in the stripped-down condition such as the status without the exterior parts or for using commodities that are not yet conformable to the interchangeable ring.

11. Light box  
To be used for adjustment of the camera system.
12. Camera stand  
To be used together with the INF adjustment lens holder.
13. Patch cord  
To be used to connect electrical parts, P.C. boards, etc. for servicing.
14. Jig connector cable  
Connected to CN105 of the main board and used for measuring error rates, etc.
15. Service support system  
To be used for adjustment with a personal computer.
16. PC cable  
To be used to connect the VideoMovie and a personal computer with each other when a personal computer is used for adjustment.
17. Soldering kit  
Thin head is made so that it can be inserted into small spaces.
18. Cleaning cloth  
Recommended cleaning cloth to wipe down the video heads, mechanism (tape transport system), optical lens surface.

### 1.2.2 Equipments required for adjustments

1. Personal computer (For Windows)
2. Color TV monitor
3. Oscilloscope (dual-trace type, for more than 100 MHz).
4. DIGITAL BOLT meter
5. DC power supply
6. Frequency counter
7. AC Power Adapter/DC Cord

1.3 DISASSEMBLY/ASSEMBLY OF CABINET PARTS

1.3.1 Disassembly flow chart

This flowchart indicates the disassembly step for the cabinet parts and board assembly in order to gain access to item(s) to be serviced. When reassembling, perform the step(s) in reverse order. Bend, route and dress the flat cables as they were originally.

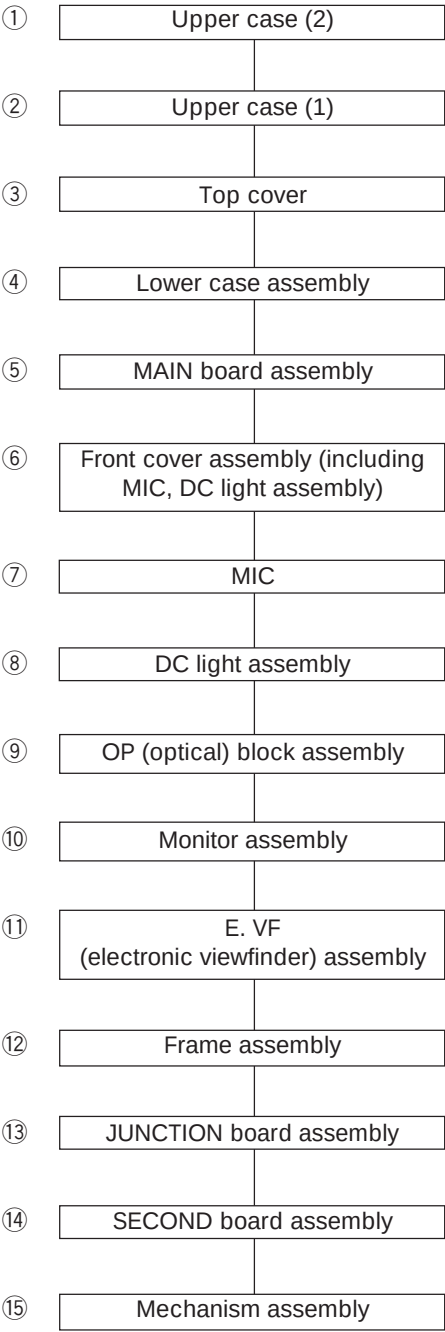


Fig. 1-3-1

1.3.2 Disassembly method

| STEP /LOC NO. | PART                                       | Fig. No.   | REMOVAL                                                        |              |
|---------------|--------------------------------------------|------------|----------------------------------------------------------------|--------------|
|               |                                            |            | UNLOCK/RELEASE/ UNPLUG/UNCLAMP/ UNSOLDER                       | Note         |
| ①             | UPPER CASE(2)                              | Fig.1-3-2  | 2(S1), (L1)                                                    | —            |
| ②             | UPPER CASE(1)                              | Fig.1-3-3  | (S1), (L2)                                                     | NOTE1,2      |
| ③             | TOP COVER                                  | Fig.1-3-4  | (S1), 2(S2), (L1), (L3), 2(L4)                                 | NOTE3,4      |
| ④             | LOWER CASE ASSY                            | Fig.1-3-5  | 5(S1), 3(S2), 2(S3), (L5), (L6) (L7) CN Ⓐ CAP (HOOD) CAP (RCA) | NOTE 5,6,7,8 |
| ⑤             | MAIN BOARD ASSY                            | Fig.1-3-6  | 3(S1), (S4), CN Ⓑ , Ⓒ , Ⓓ , Ⓔ , Ⓕ , Ⓖ , Ⓗ CAP (REAR JACK)      | NOTE 9,10,11 |
| ⑥<br>⑦<br>⑧   | FRONT COVER ASSY (INCL. MIC/DC LIGHT ASSY) | Fig.1-3-7  | (S1), (S5), (L8), (L9), CN Ⓙ                                   | NOTE11,12    |
| ⑦<br>⑧        | MIC/DC LIGHT ASSY                          | Fig.1-3-8  | (S1), (L10), (L11)                                             | NOTE 11      |
| ⑨             | OP BLOCK ASSY                              | Fig.1-3-9  | 2(S6)                                                          | NOTE13       |
| ⑩             | MONITOR ASSY                               | Fig.1-3-10 | 3(S1), (L1)                                                    | NOTE14,15    |
| ⑪             | E.VF ASSY                                  | Fig.1-3-11 | 2(S1), (S7)                                                    | NOTE16,17    |
| ⑫             | FRAME ASSY                                 | Fig.1-3-12 | 4(S1), (L3) CN Ⓚ                                               | —            |
| ⑬             | JUNCTION BOARD ASSY                        | Fig.1-3-13 | (S8), (S9), (L12), (L13) CN Ⓛ , Ⓜ , Ⓝ , Ⓞ                      | NOTE18,19    |
| ⑭             | SECOND BOARD ASSY                          | Fig.1-3-14 | (S8), (L14), (L15), (L16), (L17) SHIELD COVER CN Ⓟ , Ⓠ , Ⓡ     | —            |
| ⑮             | MECHANISM ASSY                             | Fig.1-3-15 | 2(S10), HOLDER                                                 | —            |

List of Abbreviations: (S1)=Screw (S1)  
2(L4)=2 Locking Tabs (L4)

① Upper case (2)

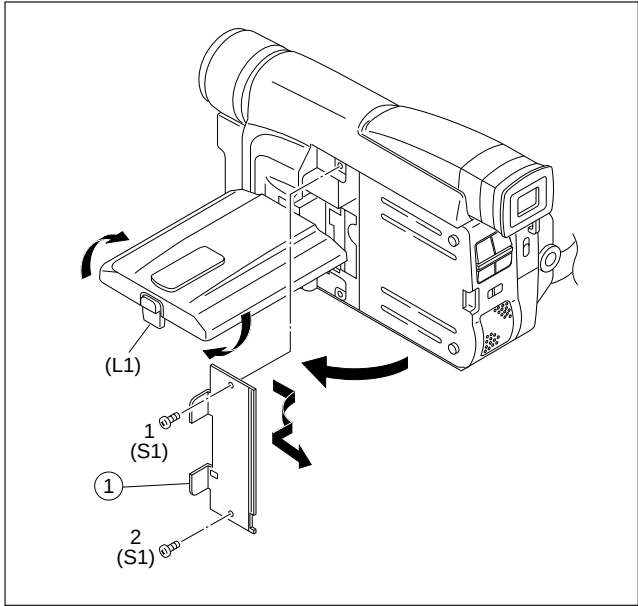


Fig. 1-3-2



## ② Upper case (1)

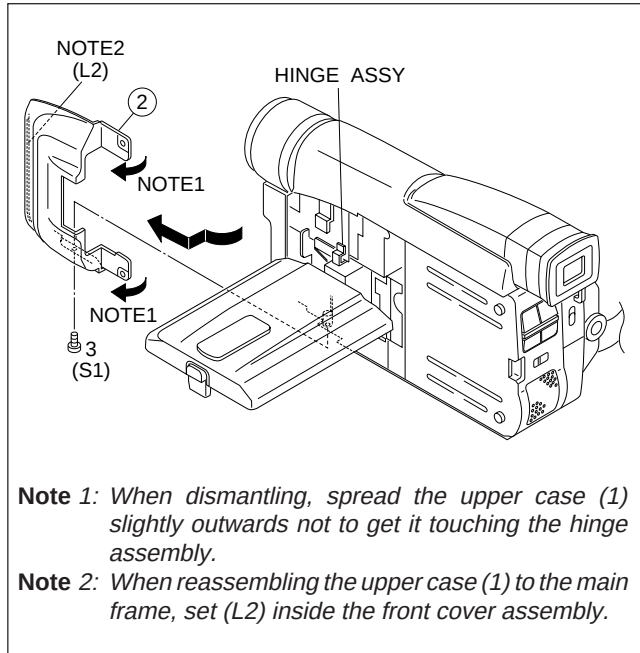


Fig.1-3-3

## ③ Top cover

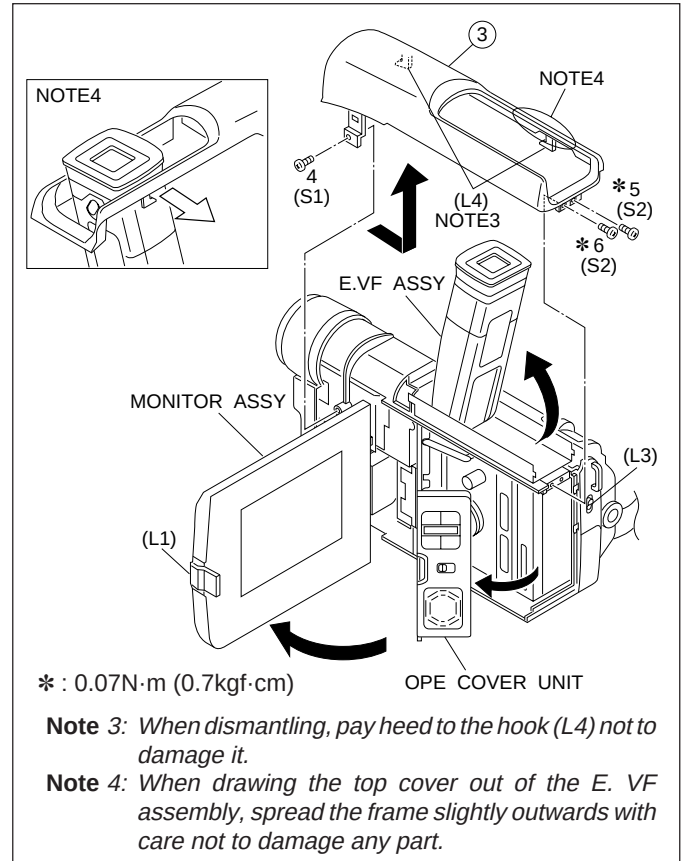


Fig. 1-3-4

## ④ Lower case assembly

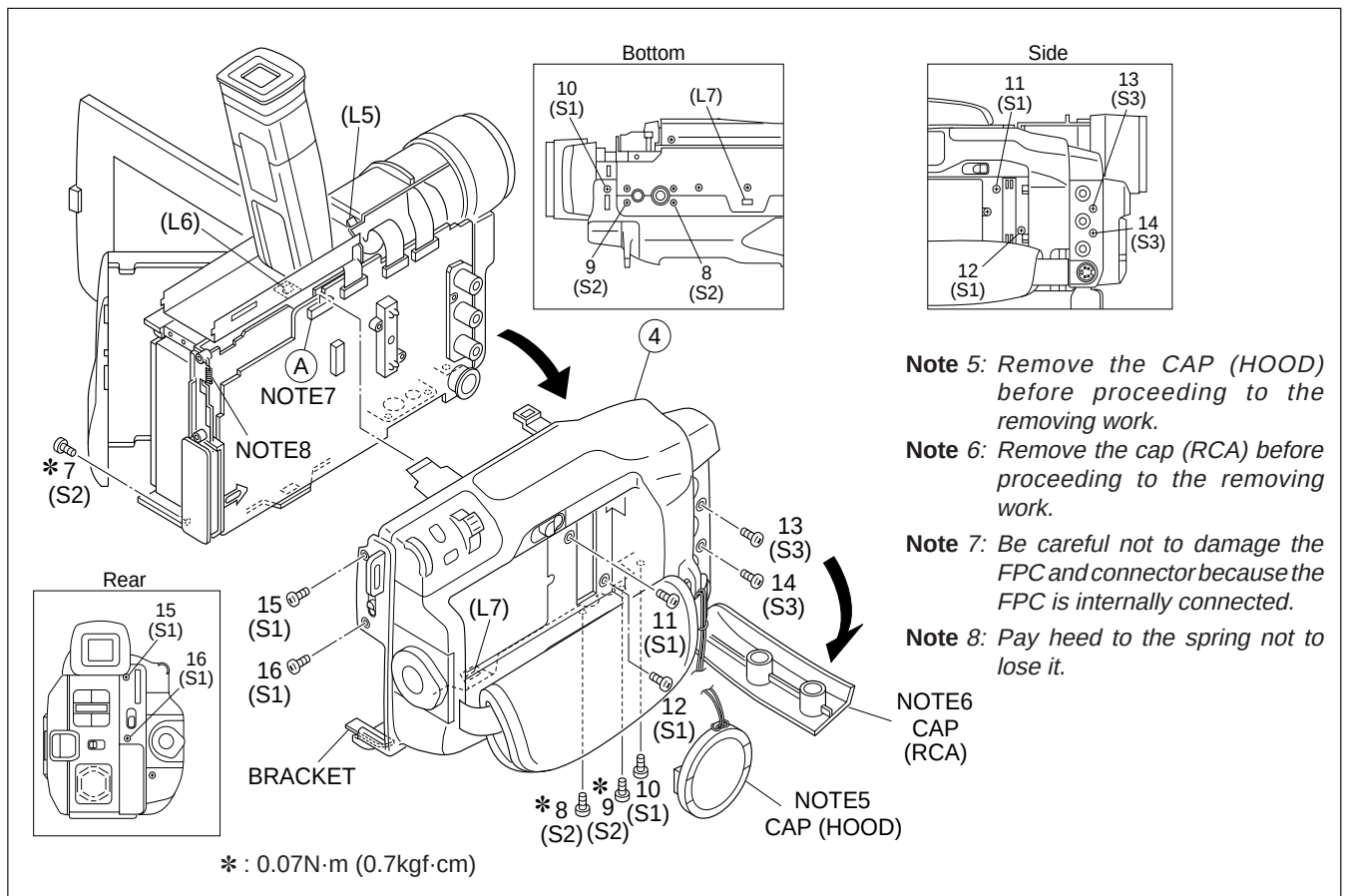


Fig. 1-3-5

## ⑤ MAIN board assembly

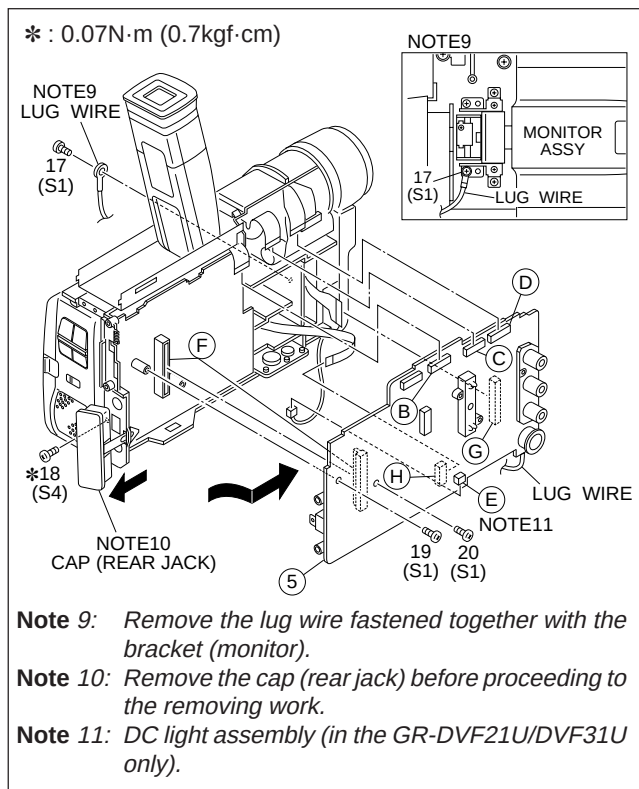


Fig. 1-3-6

## ⑦ MIC / ⑧ DC light assembly

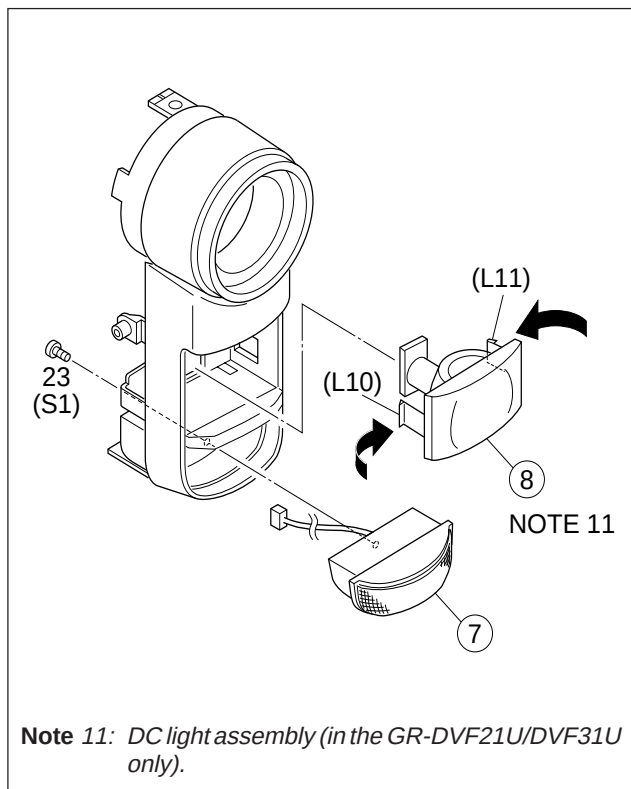


Fig. 1-3-8

## ⑥ Front cover assembly (including ⑦ MIC / ⑧ DC light assembly)

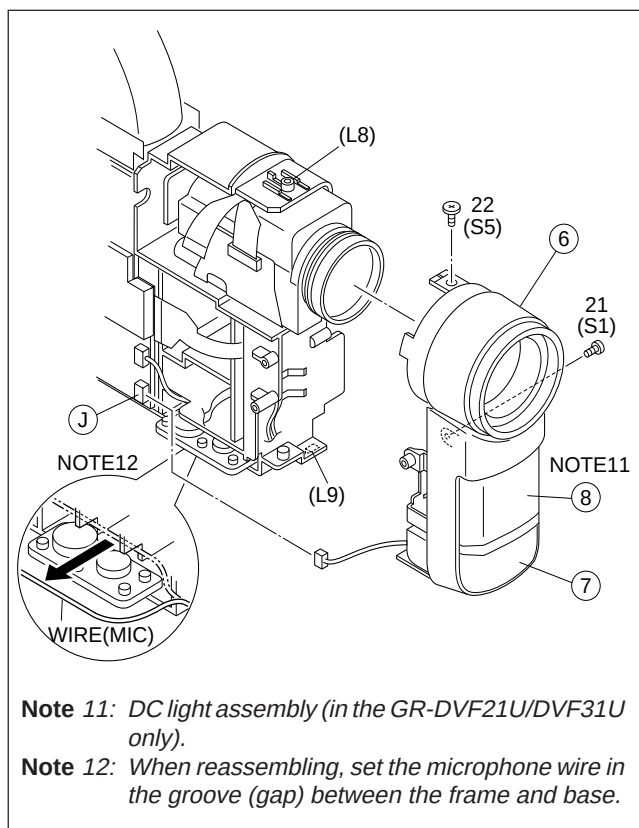


Fig. 1-3-7

## ⑨ OP (optical) block assembly

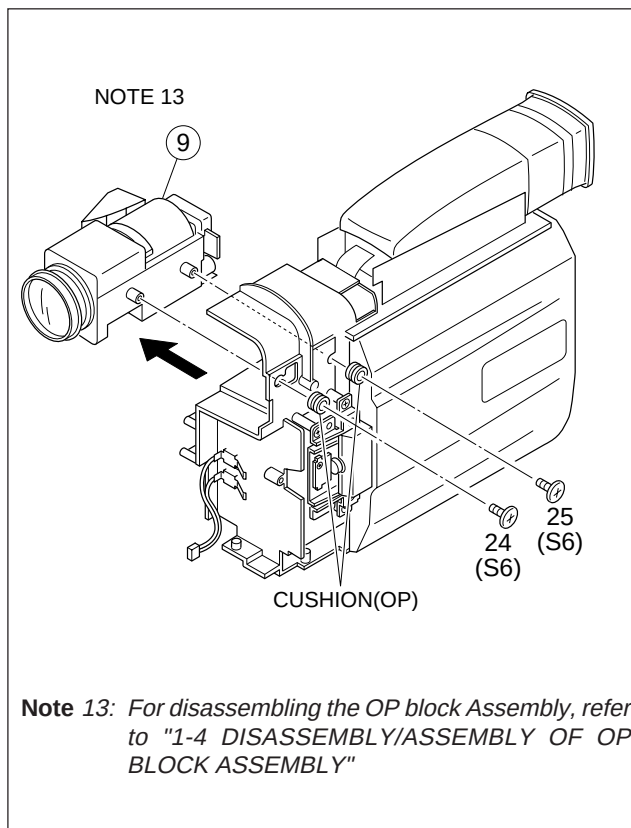


Fig. 1-3-9

## ⑩ Monitor assembly

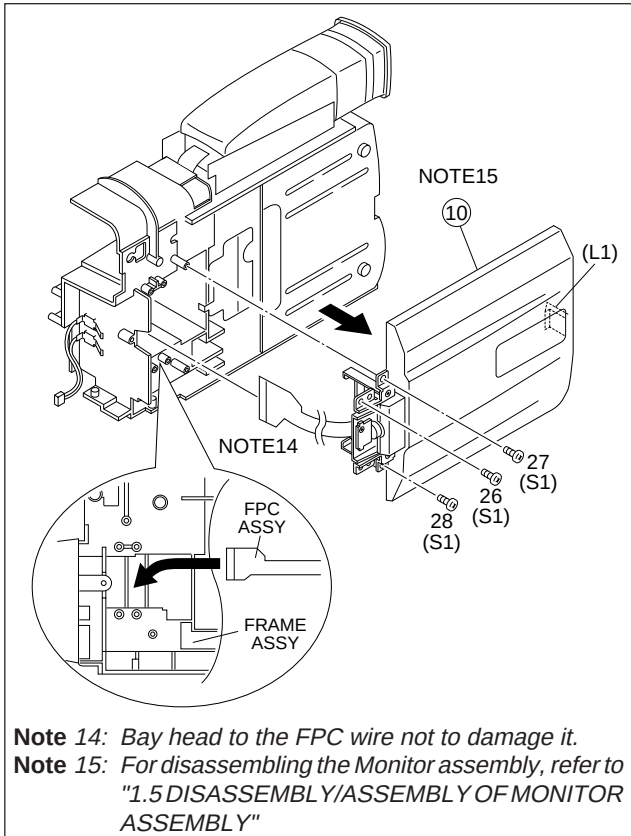


Fig. 1-3-10

## ⑫ Frame assembly

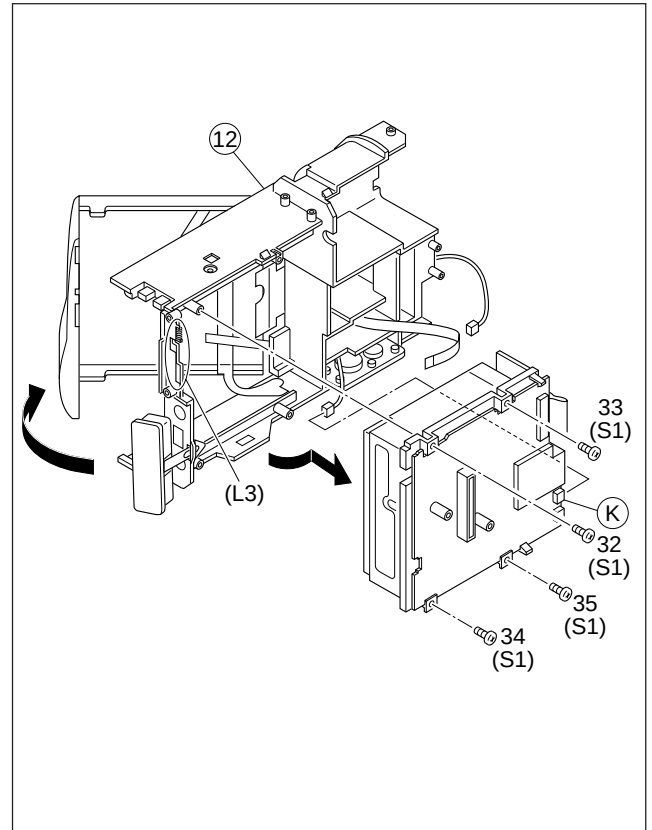


Fig. 1-3-12

## ⑪ E. VF (electronic viewfinder) assembly

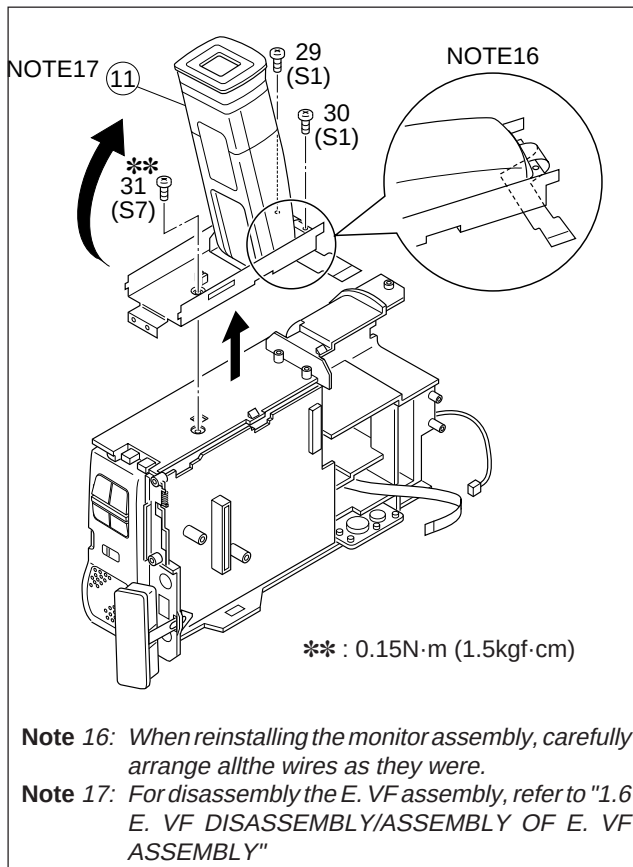


Fig. 1-3-11

## ⑬ JUNCTION board assembly

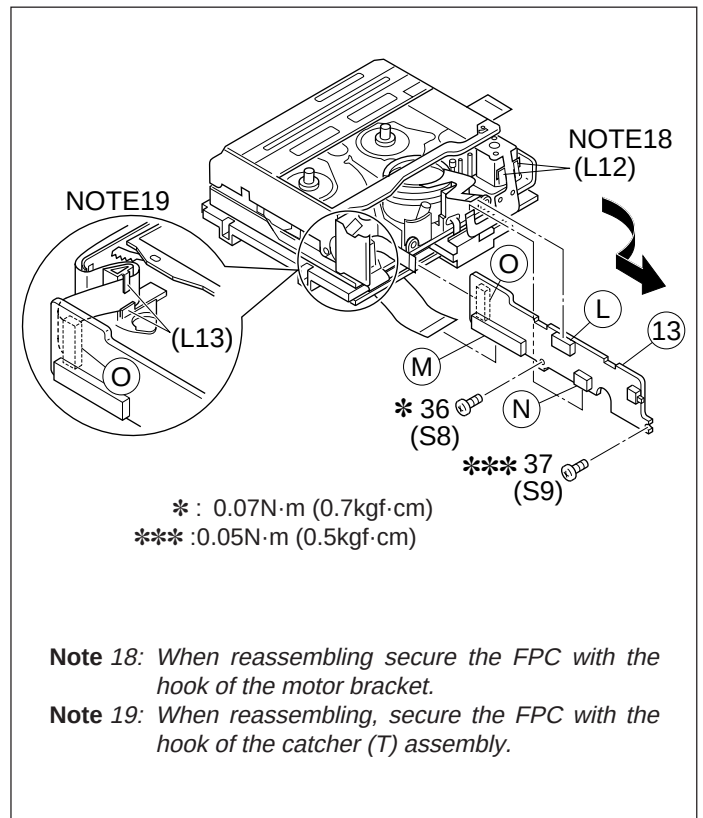


Fig. 1-3-13

# ⑭ SECOND board assembly

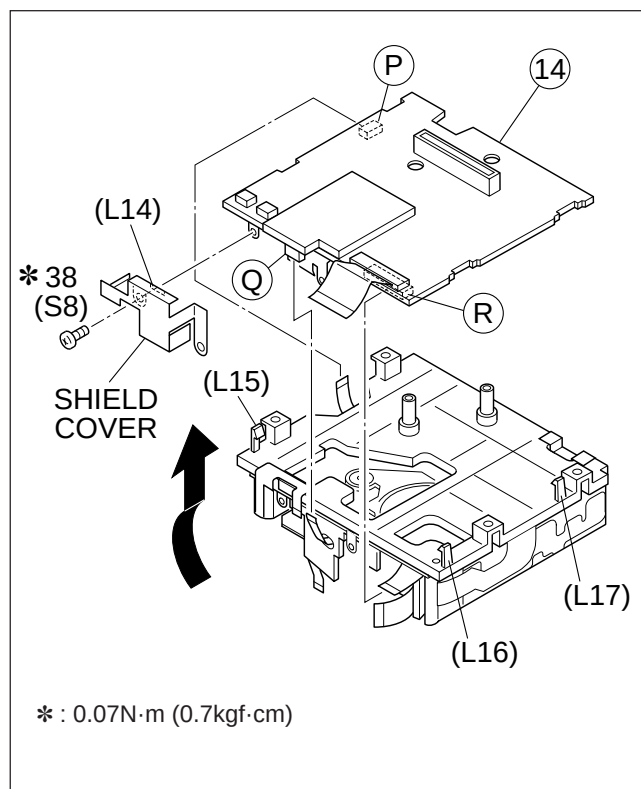


Fig. 1-3-14

# ⑮ Mechanism assembly

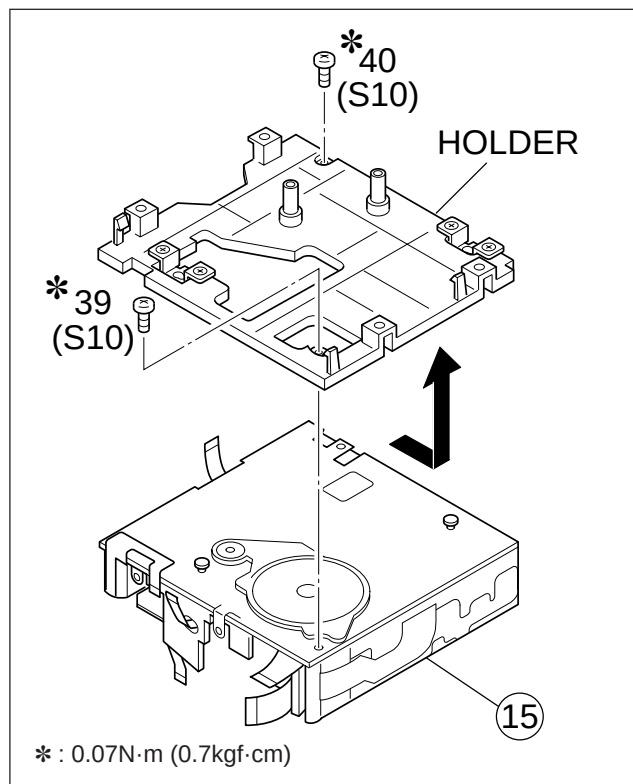


Fig. 1-3-15

## 1.4 DISASSEMBLY/ASSEMBLY OF OP BLOCK

### 1.4.1 Precautions

1. Throughout disassembly/assembly of the OP block assembly, pay careful attention to the CCD image sensor, optical LPF, lens and so on not to damage or soil them, particularly to their respective surfaces so as to prevent them from getting dust, soiled or scratched. If some of them is soiled with a fingerprint, etc., wipe it out with silicone paper, clean chamois, cleaning cloth, or the like.
2. The spare CCD image sensor is occasionally shipped from the factory as the protection seal is stuck onto its transparent glass. If so, leave the protection seal as it is and remove it just before assembling the new CCD image sensor to the OP block assembly.

### 1.4.2 Disassembly

1. Unsolder the CCD board assembly by 14 terminals (SD1).
  2. Remove one screw (1) and then remove the CCD board assembly.
- Note 1:** If the CCD board assembly is removed together with the CCD base assembly, it is not required to remove the screw (1).
3. Remove two screws (2, 3) and then remove the CCD base assembly.
- Note 2:** When removing the CCD base assembly, pay heed to the spacer rubber and optical LPF, for they are also removed together with the CCD image sensor.
- Note 3:** Replace the CCD image sensor as it is mounted on the CCD base assembly. In other words, remove the old CCD image sensor from the CCD base assembly and mount a new CCD image sensor on it.
4. Remove the CCD spacer, optical LPF and spacer rubber.

### 1.4.3 Assembly

1. As the optical LPF is fitted with the spacer rubber, set it in the holder located in the center of the lens of the OP block assembly.
- Note 4:** When mounting the optical LPF, pay heed to its orientation because it has different surfaces in the front and back sides.
2. Making sure that the spacer rubber and optical LPF are positioned right, mount the CCD spacer and CCD base assembly and fasten them with two screws.
  3. Mount the CCD board assembly and fasten it with one screw.
  4. Solder 14 terminals (SD1) of the CCD base assembly.

### 1.4.4 Replaceable parts of OP block assembly

Besides the CCD image sensor, replaceable parts for servicing the OP block assembly are as follows.

- Focus motor
- Zoom motor
- Iris motor unit

**Note 5:** The iris motor unit includes one FPC assembly and two sensors.

**Note 6:** Throughout disassembly/assembly work, be very careful not to break the FPC and not to overheat any part during soldering.

**Note 7:** When soldering the focus motor and zoom motor, slightly lift up the FPC so that there is a space of 1 mm or so remaining between the FPC and terminals.

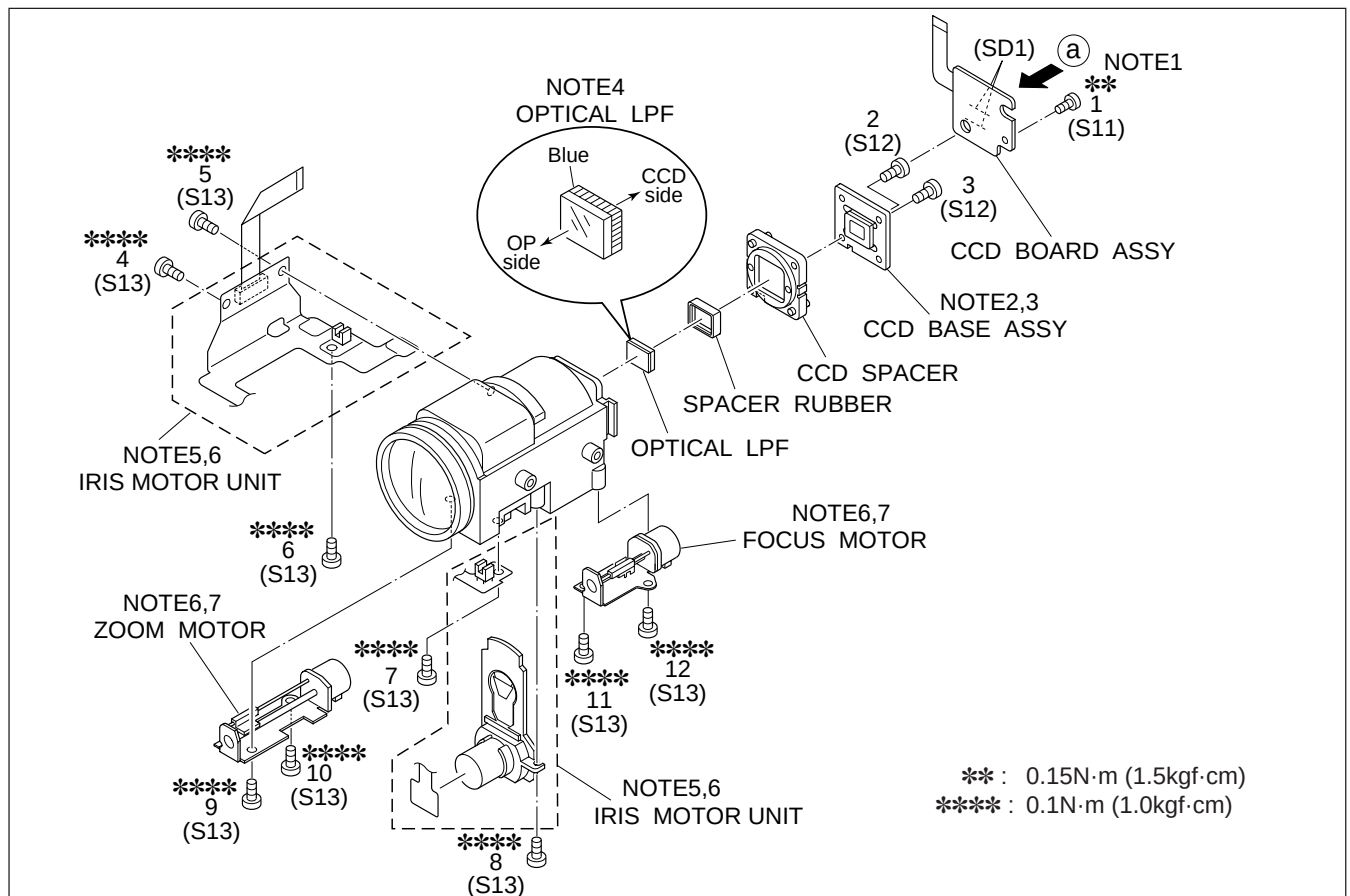


Fig. 1-4-1



## 1.5 DISASSEMBLY/ASSEMBLY OF MONITOR ASSEMBLY

**Note 1:** For a convenience of explanation, the monitor assembly is roughly divided into two blocks as mentioned below.

- Monitor block (monitor cover assembly/monitor case assembly, MONITOR board assembly, etc.)
- Hinge assembly block (hinge cover [upper/lower], FPC assembly, bracket)

Don't remove the screws of No. 5 to No. 10 except for dismantling the hinge assembly block (hinge cover [upper/lower], FPC assembly and bracket).

**Note 2:** Don't reuse any screw that was once removed for disassembling.

**Note 3:** Be careful not to break down any switch (open/closed status sensor) and FPC.

1. Remove four screws (1 to 4) first, and then remove the monitor cover assembly unhooking it by 7 points (L2 to L8) while releasing L1 from locking.
2. While unlocking the connector ㉓, pull out the FPC and then remove the hinge assembly.

**Note 4:** The following steps (3 to 8) explain the procedure to disassemble the monitor block.

### <Disassembly of monitor block>

3. Pull the wire out of the connector ㉓.
4. Unlock the connector ㉓ and pull out the FPC. While unhooking two hooks (L9, L10), remove the MONITOR board assembly.

**Note 5:** When remounting the MONITOR board assembly, carefully arrange the FPC and wires.

**Note 6:** In case of the 3-inch monitor, fold down the FPC on the connector ㉓.

5. After unhooking seven hooks (L11 to L17) in the numerical order, remove the holder (PWB).

**Note 7:** When remounting the holder (PWB), arrange the backlight wires inside the holder.

After remounting the holder, check to see if it is tightly fastened without wobbling while paying heed to the hooking (L12, L14) of the backlight.

6. Remove the backlight.
7. Remove the LCD module.
8. Remove the holder (LCD) and bracket (earth).

**Note 8:** The holder (LCD) is used only for the 3-inch monitor.

### <Disassembly of hinge assembly block>

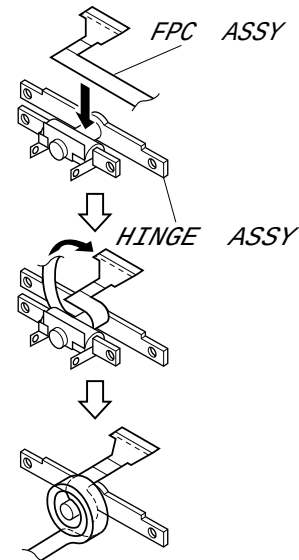
9. Remove one screw (5) and then remove the SWITCH (open/closed) board assembly.
10. Remove two screws (6, 7) and then remove the bracket.
11. Remove one screw (8) and then remove the SWITCH (rotation) board assembly.
12. Remove two screws (9, 10) and then remove the hinge cover (U) while unhooking it by four points (two hooks of L20 and two hooks of L21) on both sides.
13. While displacing the hinge cover (L), pull out the FPC assembly and finally remove the hinge cover.

**Note 8:** Since the FPC assembly is branched into two, first remove the SWITCH (open/closed) board assembly and then disconnect the other branch of the FPC assembly.

14. Remove the FPC assembly from the hinge assembly.

**Note 10:** Carefully handle the FPC not to break it.

### NOTE10, 11



**Note 11:** The FPC assembly should be wound around the hinge assembly by two and half turns so that the wire to be connected to the monitor board assembly is positioned inside.

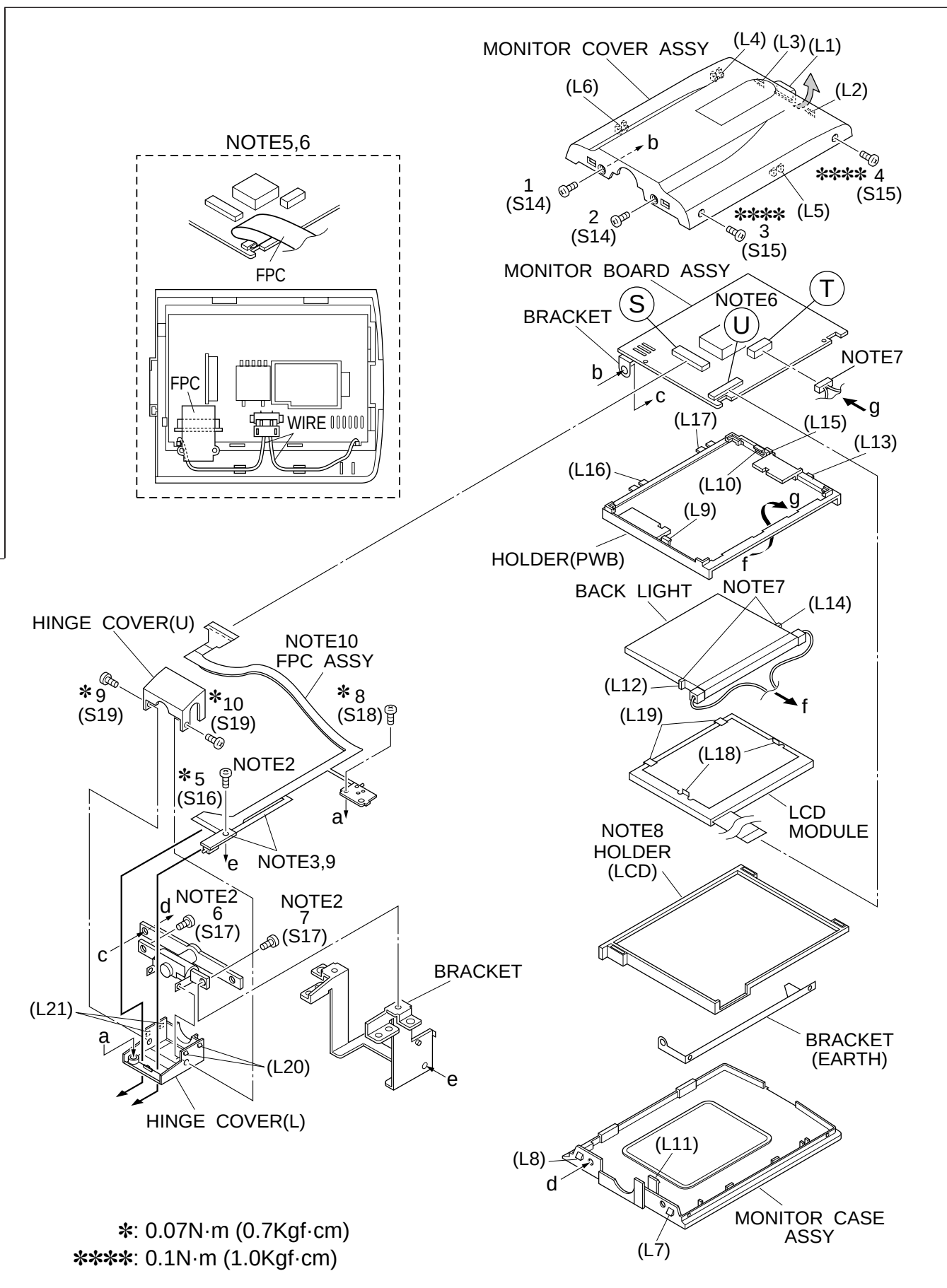


Fig. 1-5-1

## 1.6 DISASSEMBLY/ASSEMBLY OF ELECTRONIC VIEWFINDER (VF)

### 1.6.1 Disassembly/Assembly of B/W VF

**Note 1:** When remove the B/W VF, leave the hinge assembly (VF), bracket (VF) and VF case (L) as they are fitted to the VF. For remove the hinge assembly (VF) and bracket (VF), refer to the exploded view (section 5).

1. Raising the VF assembly, remove two screws (1, 2) and then remove the eye piece assembly.
2. Remove two screws (3, 4) and then remove the VF case assembly (U) while unhooking it from L1 and L2.

**Note 2:** When assembling, move the FPC inwards with a wire paying careful attention to it not to break it.

3. Pull the wire out of the connector V.
4. Unlocking the connector W, pull out the FPC.
5. While holding the holder (LCD) by hand, remove the LCD module together with the backlight.

**Note 3:** When assembling, set the bosses (L3, L4) of the holder (LCD) in the groove.

6. Remove one screw (5) and then remove the VF (B/W) board assembly.

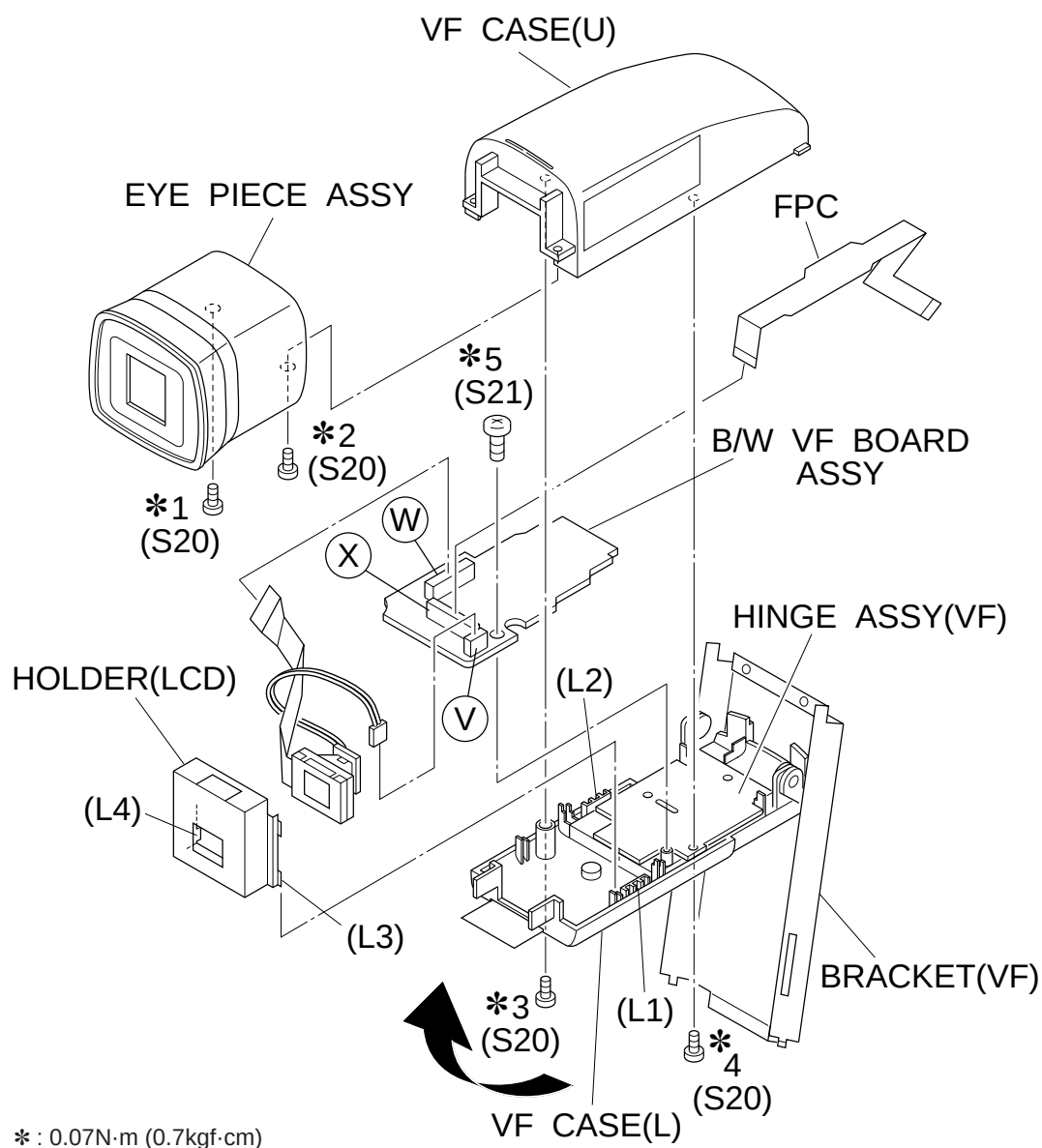


Fig. 1-6-1

### 1.6.2 Disassembly/assembly of COLOR VF

**Note 1:** When remove the color VF, leave the hinge assembly (VF), bracket (VF) and VF case (L) as they are fitted to the VF. For remove the hinge assembly (VF) and bracket (VF), refer to the exploded view (section 5).

1. Raising the VF assembly, remove two screws (1, 2) and then remove the eyepiece assembly.
2. Remove two screws (3, 4) and then remove the VF case assembly (U) while unhooking it from L1 and L2.

**Note 2:** When assembling, pay careful attention to the FPC not to break it.

3. While holding the holder (LCD) by hand, remove the VF BL board assembly.

**Note 3:** When assembling, set the bosses (L3, L4) of the holder (LCD) in the groove.

4. While unhooking the holder (LCD) from the hooks (L5, L6) on both sides, remove the holder.

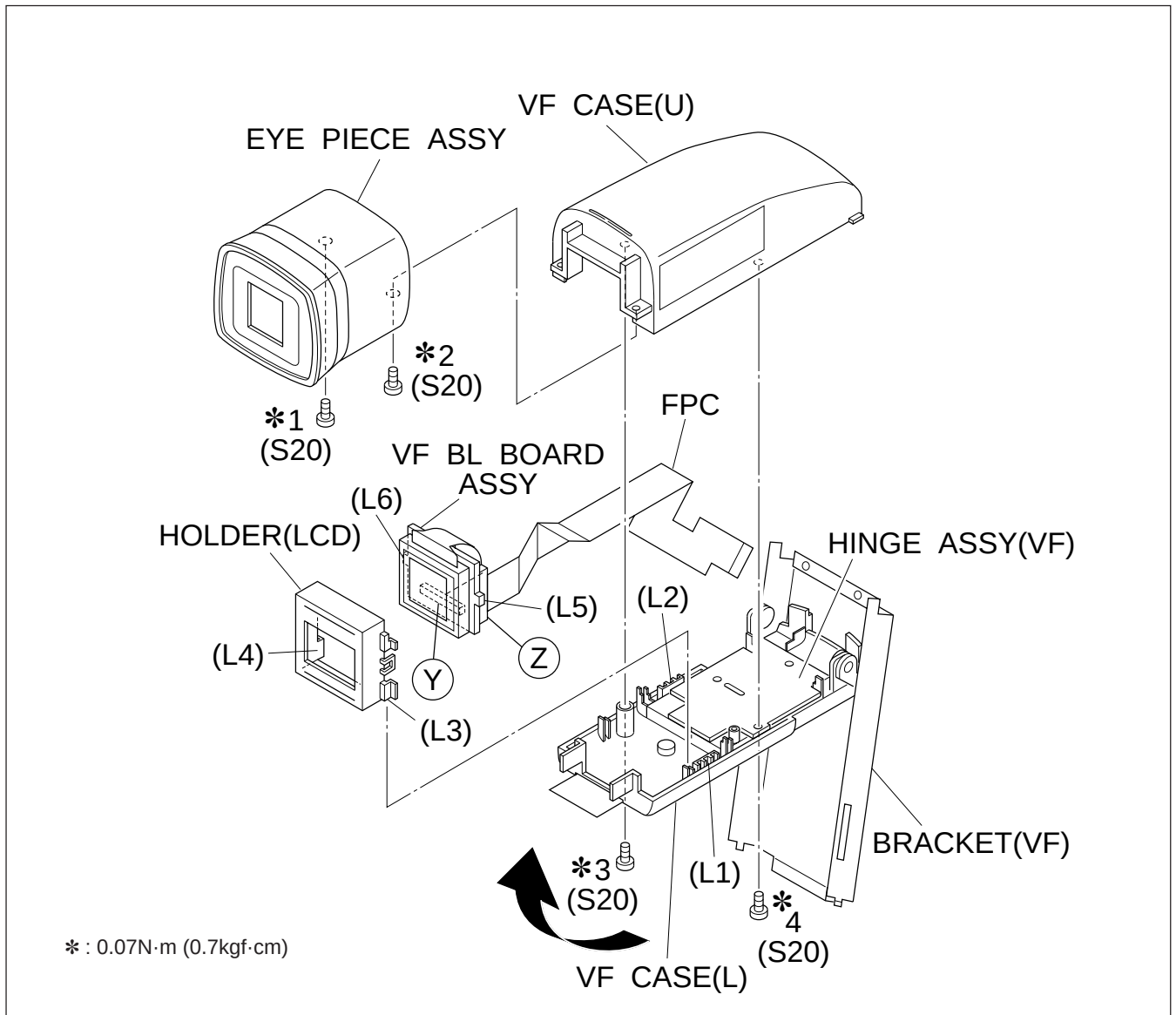


Fig. 1-6-2

## LIST&lt;DISASSEMBLY&gt;

: Connector of removed component during disassembly

| No. | Fig No. | SYMBOL | Connected point |        |   |                  | Pin No.       | Class    | Note / Patch cord |                                 |
|-----|---------|--------|-----------------|--------|---|------------------|---------------|----------|-------------------|---------------------------------|
| 1   | 1-3-5   | (A)    | MAIN PWB        | CN109  | ↔ | ZOOM UNIT        | -             | 15       | FPC               | YTU94077-15 / YTU94074-15       |
| 2   | 1-3-6   | (B)    | MAIN PWB        | CN104  | ↔ | VF(B/W or COLOR) | CN7001/CN7301 | 10 or 20 | FPC               | YTU94077-10,20 / YTU94074-10,20 |
| 3   | 1-3-6   | (C)    | MAIN PWB        | CN106  | ↔ | CCD PWB          | -             | 18       | FPC               | YTU94077-18 / YTU94074-18       |
| 4   | 1-3-6   | (D)    | MAIN PWB        | CN107  | ↔ | OP BLOCK         | -             | 22       | FPC               | YTU94077-22 / YTU94074-22       |
| 5   | 1-3-6   | (E)    | MAIN PWB        | CN108  | ↔ | DC LIGHT         | -             | 2        | WIRE              | NC                              |
| 6   | 1-3-6   | (F)    | MAIN PWB        | CN101  | ↔ | SECOND PWB       | CN301         | 100      | B-B               | YTU94126A-100                   |
| 7   | 1-3-6   | (G)    | MAIN PWB        | CN102  | ↔ | HINGE ASSY       | -             | 40       | FPC               | DIRECT                          |
| 8   | 1-3-6   | (H)    | MAIN PWB        | CN110  | ↔ | OPE COVER UNIT   | -             | 10       | FPC               | YTU94077-10 / YTU94074-10       |
| 9   | 1-3-7   | (J)    | SECOND PWB      | CN302  | ↔ | MIC              | -             | 3        | WIRE              | DIRECT                          |
| 10  | 1-3-12  | (K)    | SECOND PWB      | CN304  | ↔ | SPEAKER          | -             | 2        | WIRE              | NC                              |
| 11  | 1-3-13  | (L)    | JUNCTION PWB    | CN503  | ↔ | DRUM MOTOR       | -             | 11       | FPC               | DIRECT                          |
| 12  | 1-3-13  | (M)    | JUNCTION PWB    | CN501  | ↔ | SECOND PWB       | CN401         | 35       | FPC               | DIRECT                          |
| 13  | 1-3-13  | (N)    | JUNCTION PWB    | CN504  | ↔ | LOADING MOTOR    | -             | 6        | FPC               | DIRECT                          |
| 14  | 1-3-13  | (O)    | JUNCTION PWB    | CN502  | ↔ | SENSOR           | -             | 15       | FPC               | DIRECT                          |
| 15  | 1-3-14  | (P)    | SECOND PWB      | CN403  | ↔ | ROTARY ENCODER   | -             | 6        | FPC               | YTU94077-6 / YTU94074-6         |
| 16  | 1-3-14  | (Q)    | SECOND PWB      | CN404  | ↔ | HEAD             | -             | 8        | FPC               | YTU94077-8 / YTU94074-8         |
| 17  | 1-3-14  | (R)    | SECOND PWB      | CN402  | ↔ | CAPSTAN MOTOR    | -             | 18       | FPC               | DIRECT                          |
| 18  | 1-5-1   | (S)    | MONITOR PWB     | CN7501 | ↔ | HINGE ASSY       | -             | 38       | FPC               | DIRECT                          |
| 19  | 1-5-1   | (T)    | MONITOR PWB     | CN7503 | ↔ | BACK LIGHT       | -             | 2        | WIRE              | DIRECT                          |
| 20  | 1-5-1   | (U)    | MONITOR PWB     | CN7502 | ↔ | LCD MODULE       | -             | 24       | FPC               | DIRECT                          |
| 21  | 1-6-1   | (V)    | VF(B/W) PWB     | CN7003 | ↔ | BACK LIGHT       | -             | 2        | WIRE              | DIRECT                          |
| 22  | 1-6-1   | (W)    | VF(B/W) PWB     | CN7002 | ↔ | LCD MODULE       | -             | 20       | FPC               | DIRECT                          |
| 23  | 1-6-1   | (X)    | VF(B/W) PWB     | CN7001 | ↔ | MAIN PWB         | CN104         | 10       | FPC               | YTU94077-10 / YTU94074-10       |
| 24  | 1-6-2   | (Y)    | VF(COLOR) PWB   | CN7302 | ↔ | LCD MODULE       | -             | 16       | FPC               | DIRECT                          |
| 25  | 1-6-2   | (Z)    | VF(COLOR) PWB   | CN7301 | ↔ | MAIN PWB         | CN104         | 20       | FPC               | YTU94077-20 / YTU94074-20       |
| 26  | -       | -      | MAIN PWB        | CN105  | ↔ | JIG CONN.        | -             | 30       | B-B               | YTU93082C (JIG CONNECTOR)       |

Fig. 1-7-1



## 1.8 HOW TO TAKE OUT CASSETTE TAPE MANUALLY

On the occasion that the cassette tape cannot be ejected because of an electrical trouble, remove the cassette tape manually according to the following procedure.

Since the following procedure is just a simple measure to remove the cassette tape, it is recommended to dismantle cabinet parts and externally installed components as many as possible so that the cassette tape can be removed smoothly without force from viewpoints of workability and reliability of the removing work.

1. Disconnect all the power supplies (battery and DC cord) from the camera.
2. Open the monitor assembly and remove the upper cases (2) and (1). (Refer to Fig. 1-3-2 and 1-3-3.)
3. Open the cassette cover assembly.
4. Connect 3 V DC power to the electrodes on the top of the loading motor to slide the slide deck assembly towards the front side and stop the power supply when both the pole bases are located inside the tape as their unloading operation. At this point pay careful attention to the tape not to get it damaged or soiled with grease, etc., because the tape remains outside the cassette as it is not wound completely. If the DC power is continuously supplied after both the pole bases are returned inside the tape, the mechanism enters the eject mode and the cassette housing is accordingly lifted up. If this

operation takes place, the part of the tape remaining outside is caught in the cassette lid and the tape may be damaged partially. Be careful not to supply the DC power excessively.

5. Turn the center gear with a sharp-pointed stick (chip IC replacing jig, etc.) in the direction of the arrow to wind up the remaining part of the tape. At that time, carefully turn the center gear not to damage the tape.

If the remaining part of the tape cannot be wound inside the cassette though the center gear is turned, it is thinkable that the idler arm assembly is located at a point where it does not engage with the reel disk assembly. If so, shift the mechanism mode and fine adjust the position of the idler arm assembly, then try to wind up the remaining tape once again.

For adjusting the position of the idler arm assembly, it is recommended to shift it slightly in the loading direction.

6. After making sure that the tape is completely wound inside the cassette, proceed with unloading operation of the mechanism until it reaches the eject position and remove the cassette tape at this mechanism position.
7. After removing the cassette tape out of the cassette housing, check to see if the part of the tape that was wound manually is soiled with grease, etc. or not. At the same time, check the mechanism, particularly the tape transport system, for soil with grease, etc.

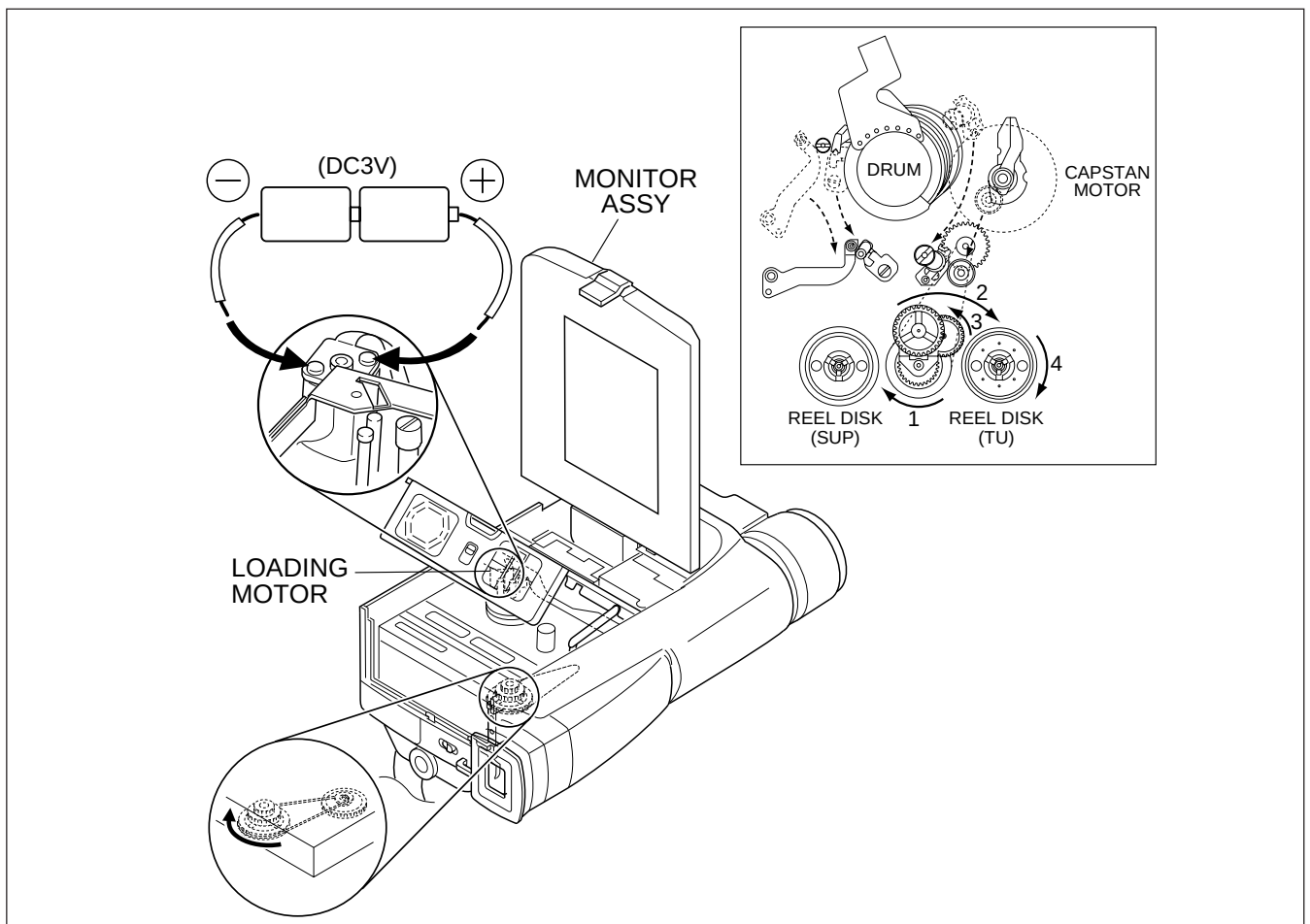


Fig. 1-8-1

## 1.9 EXTENTION CABLE CONNECTION

| No. | Connected point |   |                   | Pin No. | Note/Patch cord         |
|-----|-----------------|---|-------------------|---------|-------------------------|
| ①   | MAIN PWB CN101  | ↔ | SECOND PWB CN301  | 100     | YTU94126A-100           |
| ②   | MAIN PWB CN106  | ↔ | CCD PWB           | 18      | YTU94077-18/YTU94074-18 |
| ③   | MAIN PWB CN107  | ↔ | OP BLOCK          | 22      | YTU94077-22/YTU94074-22 |
| ④   | MAIN PWB CN104  | ↔ | VF (B/W) CN7001   | 10      | YTU94077-10/YTU94074-10 |
|     | MAIN PWB CN104  | ↔ | VF (COLOR) CN7301 | 20      | YTU94077-20/YTU94074-20 |
| ⑤   | MAIN PWB CN110  | ↔ | OPE. COVER UNIT   | 10      | YTU94077-10/YTU94074-10 |
| ⑥   | MAIN PWB CN109  | ↔ | ZOOM UNIT         | 15      | YTU94077-15/YTU94074-15 |

Table 1-9-1

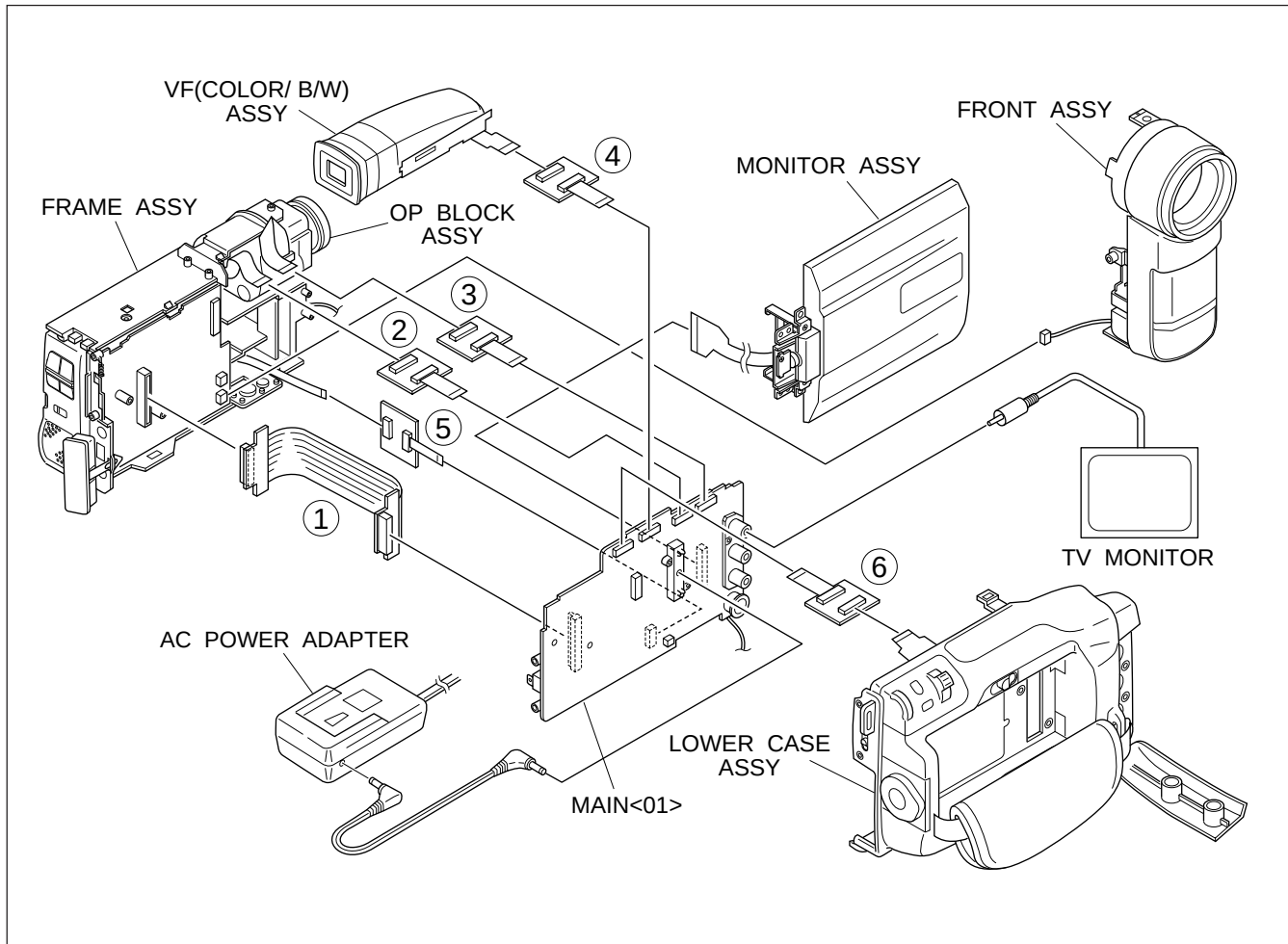


Fig. 1-9-1

## Screw Management Table

|                           |       |       |       |   |    |       |    |    |    |    |    |    |    |    |    |    |       |    |    |    |   |
|---------------------------|-------|-------|-------|---|----|-------|----|----|----|----|----|----|----|----|----|----|-------|----|----|----|---|
| Symbol No. →              | ①     | ②     | ③     | ④ |    |       |    |    |    |    |    |    |    |    |    | ⑤  |       |    |    |    |   |
| Removing order of Screw → | 1     | 2     | 3     | 4 | 5  | 6     | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17    | 18 | 19 | 20 |   |
| Place to stick Screw →    |       |       |       |   |    |       |    |    |    |    |    |    |    |    |    |    |       |    |    |    |   |
| Reference drawing →       | 1-3-2 | 1-3-3 | 1-3-4 |   |    | 1-3-5 |    |    |    |    |    |    |    |    |    |    | 1-3-6 |    |    |    |   |
| Screw tightening torque → | I     | I     | I     | I | II | II    | II | II | II | I  | I  | I  | I  | I  | I  | I  | I     | I  | II | I  | I |

|                           |          |       |   |          |                |                |                      |          |        |
|---------------------------|----------|-------|---|----------|----------------|----------------|----------------------|----------|--------|
| Symbol No. →              | ⑥／⑦／⑧    | ⑦     | ⑧ | ⑨        | ⑩              | ⑪              | ⑫                    | ⑬        | ⑭      |
| Removing order of Screw → | 21    22 | 23    | — | 24    25 | 26    27    28 | 29    30    31 | 32    33    34    35 | 36    37 | 38     |
| Place to stick Screw →    |          |       | — |          |                | *              |                      |          |        |
| Reference drawing →       | 1-3-7    | 1-3-8 |   | 1-3-9    | 1-3-10         | 1-3-11         | 1-3-12               | 1-3-13   | 1-3-14 |
| Screw tightening torque → | I    I   | I     | — | I    I   | I    I    I    | I    I    III  | I    I    I    I     | II    IV | II     |

|                           |        |    |                 |   |   |   |   |   |   |   |   |    |    |    |    |
|---------------------------|--------|----|-----------------|---|---|---|---|---|---|---|---|----|----|----|----|
| Symbol No. →              | ⑮      |    | ⑨ OP BLOCK ASSY |   |   |   |   |   |   |   |   |    |    |    |    |
| Removing order of Screw → | 39     | 40 | 1               | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Place to stick Screw →    |        |    |                 |   |   |   |   |   |   |   |   |    |    |    |    |
| Reference drawing →       | 1-3-15 |    | 1-4-1           |   |   |   |   |   |   |   |   |    |    |    |    |
| Screw tightening torque → | Ⅱ      | Ⅱ  | Ⅲ               | Ⅰ | Ⅰ | Ⅴ | Ⅴ | Ⅴ | Ⅴ | Ⅴ | Ⅴ | Ⅴ  | Ⅴ  | Ⅴ  | Ⅴ  |

|                           |                |   |   |   |    |   |   |    |    |    |                  |    |    |    |                    |    |    |    |    |
|---------------------------|----------------|---|---|---|----|---|---|----|----|----|------------------|----|----|----|--------------------|----|----|----|----|
| Symbol No. →              | ⑩ MONITOR ASSY |   |   |   |    |   |   |    |    |    | ⑪ E VF ASSY(B/W) |    |    |    | ⑪ E VF ASSY(COLOR) |    |    |    |    |
| Removing order of Screw → | 1              | 2 | 3 | 4 | 5  | 6 | 7 | 8  | 9  | 10 | 1                | 2  | 3  | 4  | 1                  | 2  | 3  | 4  | 5  |
| Place to stick Screw →    |                |   |   |   | *  | * | * |    |    |    |                  |    |    |    |                    |    |    |    |    |
| Reference drawing →       | 1-5-1          |   |   |   |    |   |   |    |    |    | 1-6-1            |    |    |    | 1-6-2              |    |    |    |    |
| Screw tightening torque → | I              | I | V | V | II | I | I | II | II | II | II               | II | II | II | II                 | II | II | II | II |

## NOTE

1) \* : Don't reuse the screw, because screw lock bond was applied to them.

2) Pay careful attention to tightening torque for each screw.

I : 0.2N·m(2.0kgf·cm)

II : 0.07N·m(0.7kgf·cm)

III : 0.15N·m(1.5kgf·cm)

IV : 0.05N·m(0.5kgf·cm)

V : 0.1N·m(1.0kgf·cm)

Fig. 1-10-1

### 1.11 PRECAUTIONS ON HANDLING THE LITHIUM SECONDARY BATTERY (J506/MAIN BOARD ASSY)

This unit is equipped with a button-type lithium secondary battery. Improper handling of this battery may cause heat to be generated, damaged, fires or leakage. Always follow the precautions below.

- ① Be sure not to shortcircuit, disassemble, deform and heat it.
- ② Carefully set the lithium battery so that its positive and negative poles are correctly connected respectively.
- ③ Don't solder anything directly to the lithium battery.
- ④ When replacing the lithium battery, be sure to do it with correct one referring to the part number appearing in the parts list of the manual.
- ⑤ When keeping the lithium battery, avoid direct sunlight, high temperature and high humidity.
- ⑥ When replacing the lithium battery, avoid using metallic tools such as tweezers, etc. for picking it up because such the tool may cause shortcircuit.
- ⑦ When disposing the lithium battery, cover the electrodes with adhesive tape or the like for insulation.

### 1.12 EMERGENCY DISPLAY

When there is something abnormal with this Digital VideoMovie during operation, an error number (Example: E01) representing the trouble appears on the LCD monitor.

| LCD display | Emergency mode | Symptom                                                                                                                                                        | Survellance mode                                          | Mode to shsift |
|-------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------|
| E01         | LOADING        | The mechanism does not shift to the next mode (in the LOADING direction) though it has passed more than 4 seconds after the mechanism was required to do it.   | LOADING                                                   | Mode continues |
| E02         | UNLOADING      | The mechanism does not shift to the next mode (in the UNLOADING direction) though it has passed more than 4 seconds after the mechanism was required to do it. | UNLOADING                                                 | Mode continues |
| E03         | REEL FG        | No REEL FG (TU or SUP) signal is input for more than 4 seconds in the mode that the reel must rotate.                                                          | When reel is rotating.                                    | STOP           |
| E04         | DRUM FG        | No DRUM FG signal is input for more than 3 seconds in the mode that the drum motor must rotate.                                                                | When drum is rotating.                                    | STOP           |
| —           | —              | —                                                                                                                                                              | —                                                         | —              |
| E06         | CAPSTAN FG     | No CAPSTAN FG signal is input for more than 1.5 seconds in the mode that the capstan motor must rotate (the pinch roller is pressed to the capstan).           | When capstan is rotating (pinch roller is pressed to it). | STOP           |

Note : Only the operation to turn on/off the power is effectual in any emergency mode.

### 1.13 DEMONSTRATION MODE

This model has the DEMONSTRATION mode.

#### 1) How to set the DEMONSTRATION mode.

The camera can be entered into the DEMONSTRATION mode by setting on the DISPLAY screen appearing on the LCD monitor (or in the viewfinder).

When entering the camera into the DEMONSTRATION mode, pay heed to the following matters.

No cassette is set in the camcorder or a cassette is set in the camcorder but it is protected from recording.

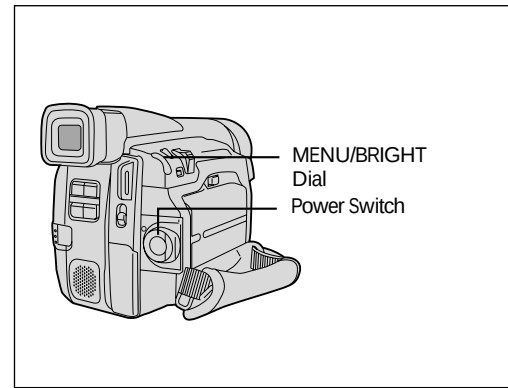
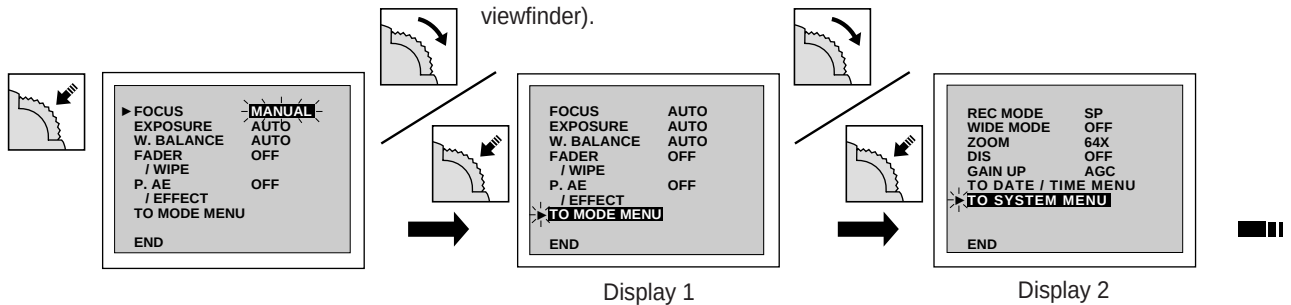
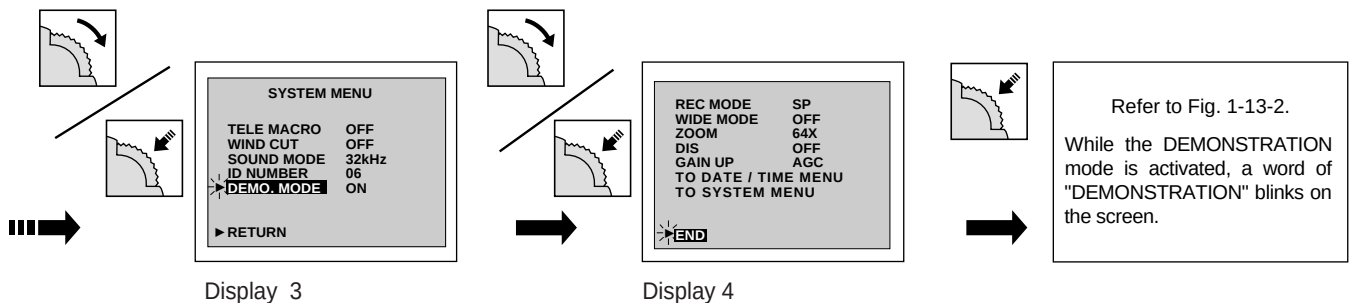


Fig. 1-13-1

1. Set the POWER switch to turn on the "M". Press the MENU/BRIGHT Dial once. The first page of the DISPLAY appears on the LCD monitor (or in the viewfinder).
2. Turn the MENU/BRIGHT Dial in the direction of the arrow to set the cursor at "TO MODE MENU". Then, press the MENU/BRIGHT Dial once. The second page of the DISPLAY appears on the LCD monitor (or in the viewfinder).
3. Turn the MENU/BRIGHT Dial in the direction of the arrow to set the cursor at "TO SYSTEM MENU". The third page of the DISPLAY appears on the LCD monitor (or in the viewfinder).



4. Turn the MENU/BRIGHT Dial in the direction of the arrow to set the cursor at "DEMO MODE". Then, press the MENU/BRIGHT Dial once. The fourth page of the DEMO MODE appears on the LCD monitor (or in the viewfinder).
5. Turn the MENU/BRIGHT Dial in the direction of the arrow to set the cursor at "ON". Then, press the MENU/BRIGHT Dial once. The fifth page of the DISPLAY appears on the LCD monitor (or in the viewfinder). ("DEMO MODE" is switched "ON" from "OFF" status.)
6. Press the SELECT DIAL once. The camcorder automatically enters the DEMONSTRATION mode and it repeats demonstration operation. While the camcorder is performing demonstration, all operations except turning on/off the POWER switch are ineffectual.





<Flow chart>

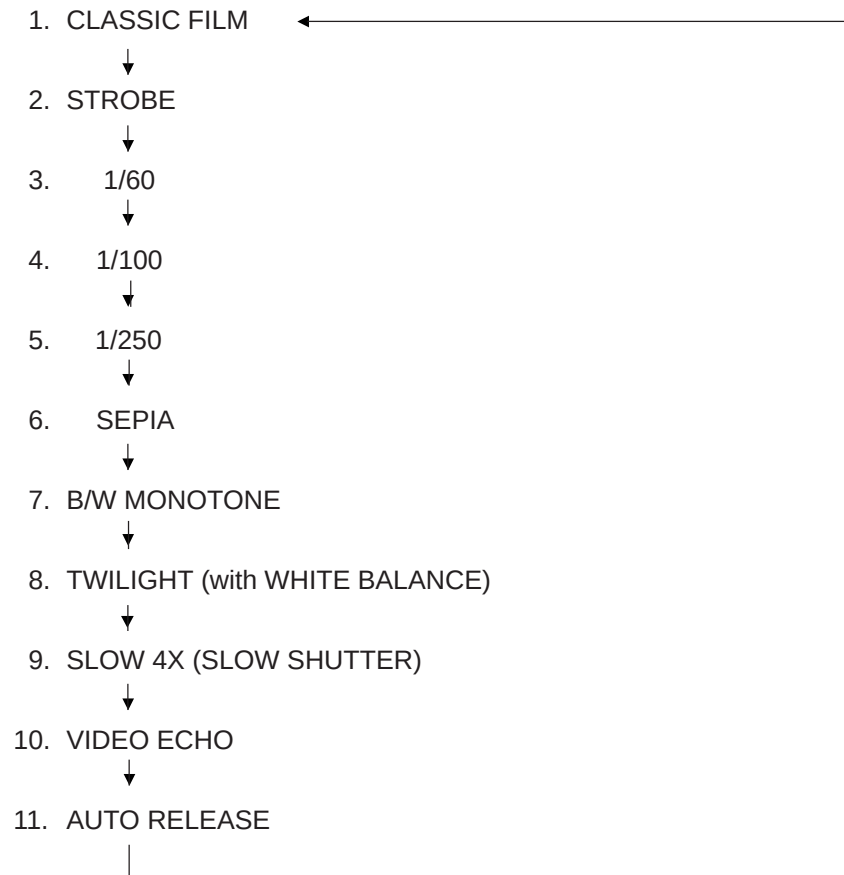


Fig. 1-13-2

- 2) How to cancel the DEMONSTRATION mode.  
To cancel the DEMONSTRATION mode, turn the  
POWER switch off ("POWER OFF").

## SECTION 2 MECHANISM ADJUSTMENT

### 2.1 PRELIMINARY REMARKS ON ADJUSTMENT AND REPAIR

#### 2.1.1 Precautions

- When fastening parts, pay careful attention to the tightening torque of each screw. Unless otherwise specified, tighten a screw with the torque of 0.04 N·m (0.4 kgf·cm).
- Be sure to disconnect the set from the power supply before fastening and soldering parts.
- When disconnecting/connecting wires, be careful not to get them and their connectors damaged. (Refer to the Section 1.)
- When replacing parts, be very careful neither to damage other parts nor to fit wrong parts by mistake.

#### 2.1.2 Necessary jigs

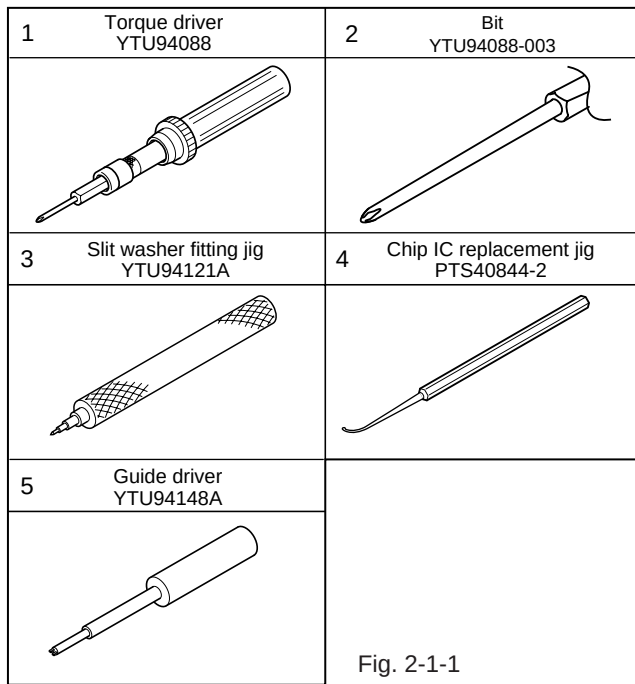


Fig. 2-1-1

#### 2.1.3 Notes on disassembling/reassembling procedure

The disassembling procedure table (Table 2-2-2 on page 2-5, a part of the table is shown below for reference) shows the procedure to disassemble/reassemble mechanism parts. Carefully read the following explanation before starting actual disassembling/reassembling work. The item numbers (circled numbers) in the following explanation correspond to those appearing under respective columns of the table.

- Circled numbers appearing in this column indicate the order to remove parts. When reassembling, follow these numbers in the reverse order. Circled numbers in this column correspond to those appearing in drawings of this section.

- This column shows part names corresponding to circled numbers in the left column.
- The symbol (T or B) appearing in this column shows the side which the objective part is mounted on.  
T = the upper side, B = the lower side
- Symbols appearing in this column indicate drawing numbers.
- This column indicates parts and points such as screws, washers, springs, and others to be removed/fitted for disassembling/reassembling the mechanism. Besides such the parts, this column occasionally indicates working points.  
P = Spring  
W = Washer  
S = Screw  
Lock (L), soldering (SD), shield, connector (CN), etc.

Example

- Remove (W1) = Washer W1.
- Remove the solder at (SD1) = Point SD1.
- Disconnect (A) = Connector (A).

- Numbers in this column represent the numbers of notes in the text. For example, "1" means "Note 1". (For parts that need phase adjustment after reassembling, refer to "2.2.7 Check and adjustment of mechanism phase".)
- This column indicates required after-disassembling/reassembling work such as phase adjustment or mechanism adjustment.

#### 2.1.4 Screws and washers used in mechanism

Table 2-1-1 shows screws and washers used in the mechanism by the part numbers with their respective symbols, shapes and colors.

When disassembling/reassembling the mechanism, be careful not to make any mistake in removing/refitting screws and washers.

| Symbol | Shape | Parts No.   |
|--------|-------|-------------|
| (S1)   |       | YQ43893-4   |
| (S2)   |       | YQ43893     |
| (S3)   |       | YQ43893-2   |
| (S4)   |       | QYSLSF2055D |
| (S5)   |       | QYSLSP2030D |

| Symbol | Shape | Parts No. |
|--------|-------|-----------|
| W1     |       | YQ44246   |
| W2     |       | YQ44246-2 |

Table 2-1-1

| Step                          | Part Name | Fig. | Point           | Note       | Remarks    |
|-------------------------------|-----------|------|-----------------|------------|------------|
| (A) Cassette housing assembly |           | T M1 | 3(S1),(L1)-(L4) | 1,28,29,30 | Adjustment |
| (1) Reel disk (SUP) assembly  |           | T M2 | (W1)            | 2,3        |            |
| (2) Reel disk (TU) assembly   |           | T M2 | (W1)            | 2,3        |            |

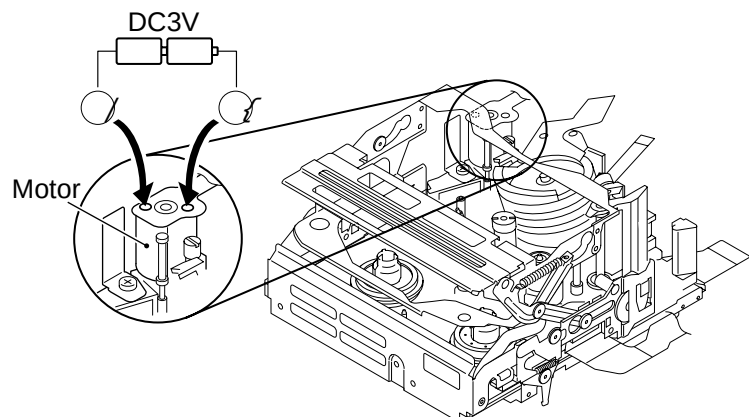
(1)      (2)      (3)      (4)      (5)      (6)      (7)

## 2.2 DISASSEMBLING/REASSEMBLING MECHANISM ASSEMBLY

### 2.2.1 General statement

The mechanism should generally be disassembled/reassembled in the EJECT mode (ASSEMBLY mode). (Refer to Fig. 2-2-1.) However, when the mechanism is removed from the main body, it is set in the STOP mode. Therefore, it is required to shift the mechanism mode from the STOP mode to the EJECT mode after the mechanism is removed from the main body. In such the case, supply 3 V DC to the electrode on the top of the loading motor to enter the mechanism mode into the EJECT mode.

#### <Mechanism assembly/Cassette housing assembly>



#### <Back side of the mechanism assembly>

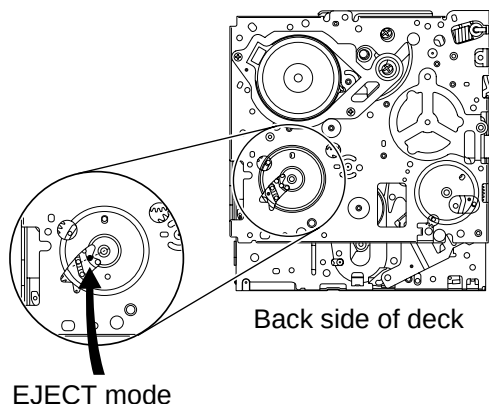


Fig. 2-2-1

### 2.2.2 Explanation of mechanism mode

The mechanism mode of this model is classified into six modes as shown in Table 2-2-1. Each mechanism mode can be distinguished from others by the relative position of "●" mark on the sub cam gear to the inner or outer protrusion on the main deck.

Refer to Fig. 2-2-2 to 2-2-7 below.

The EJECT mode, C IN mode and SHORT FF mode should be recognized by the relative position of the "●" mark to the inner protrusion, while the STOP mode, REV mode and PLAY mode should be recognized by that to the outer protrusion.

#### <EJECT mode>

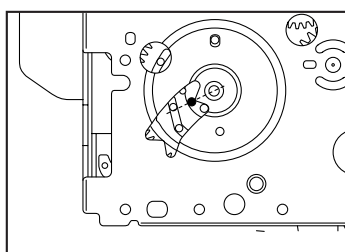


Fig. 2-2-2

#### <C IN mode>

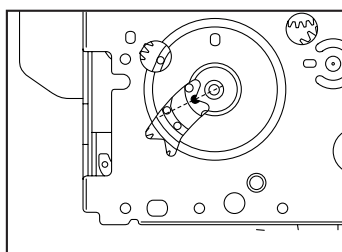


Fig. 2-2-3

#### <SHORT FF mode>

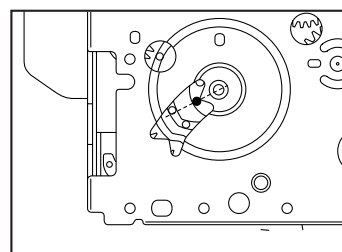


Fig. 2-2-4

#### <STOP mode>

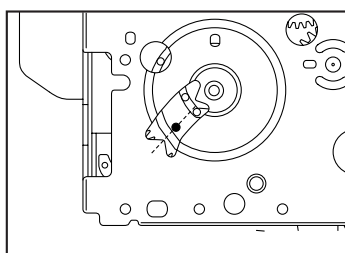


Fig. 2-2-5

#### <REV mode>

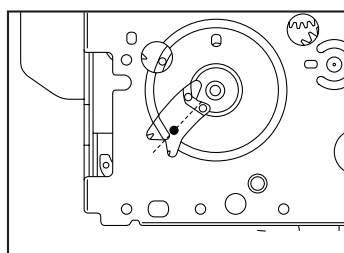


Fig. 2-2-6

#### <PLAY mode>

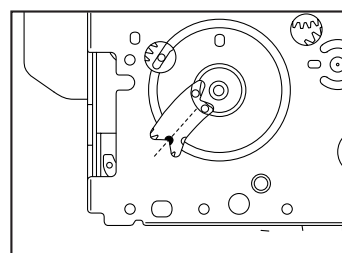


Fig. 2-2-7

2.2.3 Mechanism timing chart

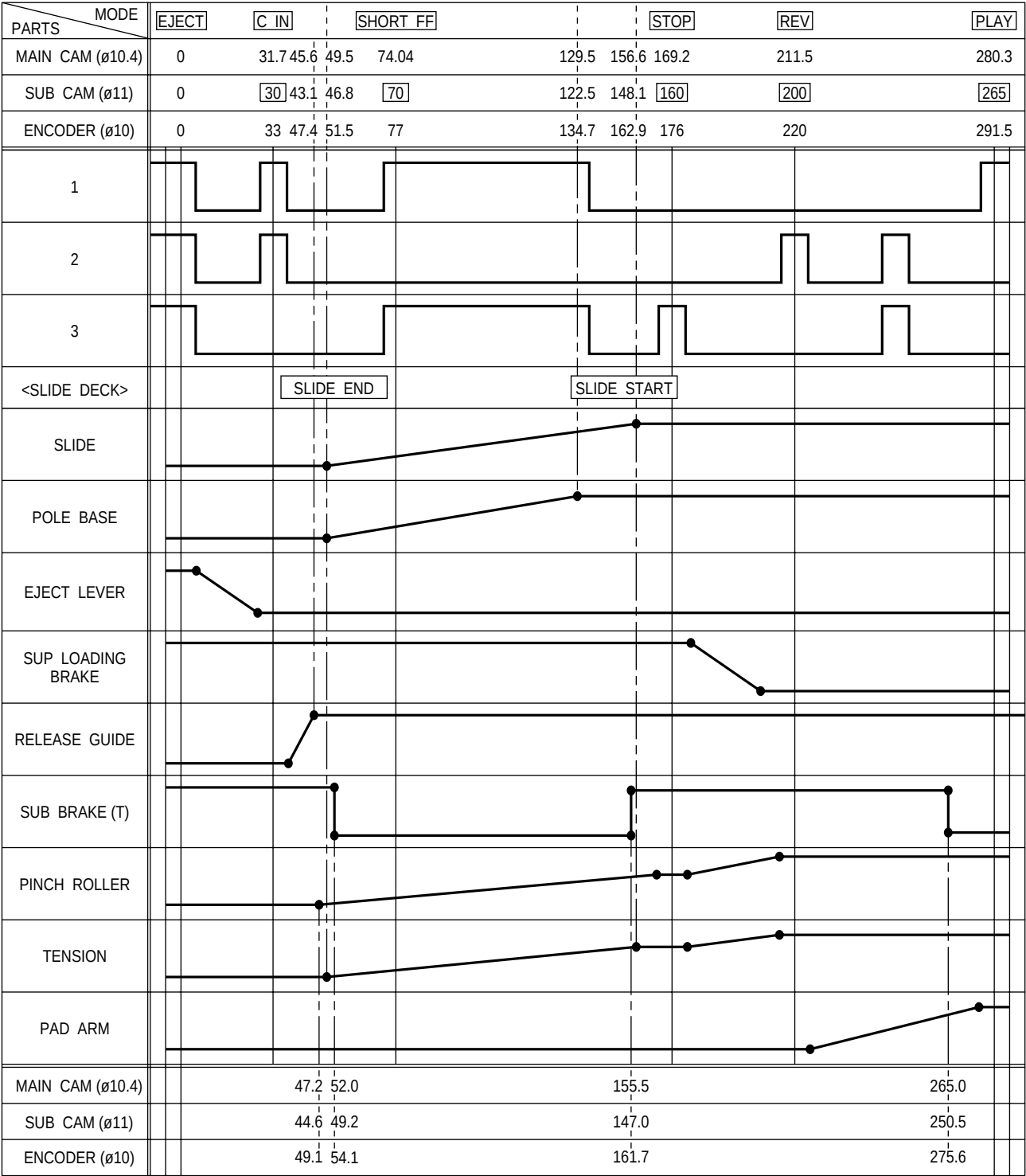


Table 2-2-1

2.2.4 Disassembling/reassembling mechanism assembly

1. Configuration

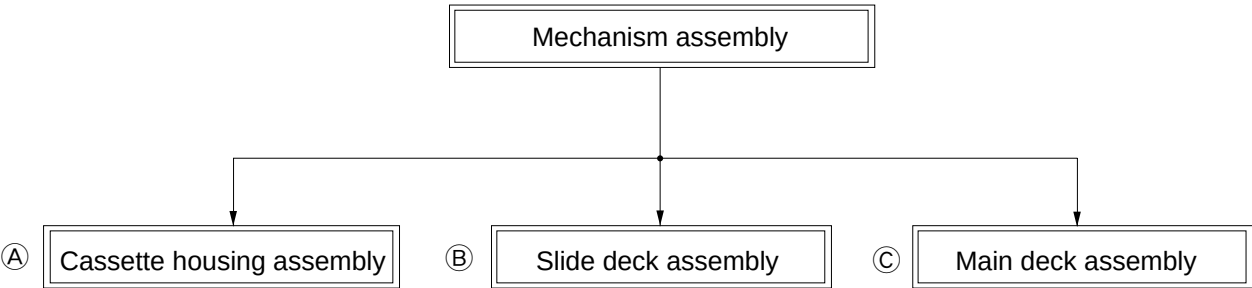


Fig. 2-2-8

2. Procedures for disassembly

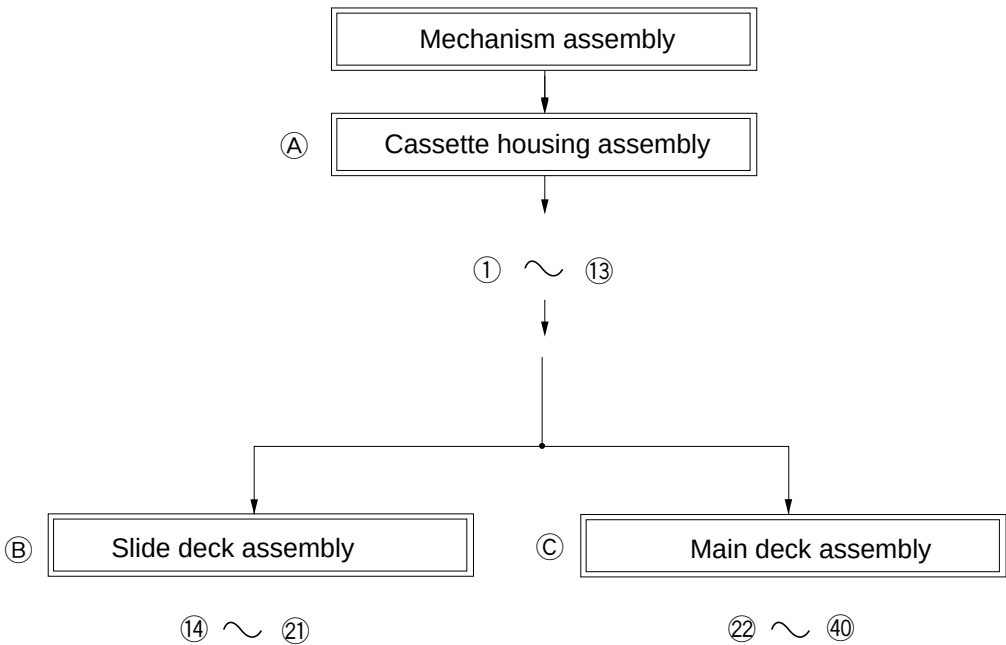


Fig. 2-2-9

### 3. Disassembling procedure table

| Step | Part Name                                  |   | Fig. | Point               | Note       | Remoarks           |
|------|--------------------------------------------|---|------|---------------------|------------|--------------------|
| ①    | Cassette housing assembly                  | T | M1   | 3(S1),(L1)-(L4)     | 1,28,29,30 | Adjustment         |
| ②    | Reel disk (SUP) assembly                   | T | M2   | (W1)                | 2,3        |                    |
| ③    | Reel disk (TU) assembly                    | T | M2   | (W1)                | 2,3        |                    |
| ④    | Reel cover assembly                        | T | M2   | (S2),2(S1),(W1)     | -          |                    |
| ⑤    | Tension arm assembly                       | T | M3   | (W1)                | 27         |                    |
| ⑥    | Release guide assembly                     | T | M3   | -                   | 4          |                    |
| ⑦    | Idler arm assembly                         | T | M3   | (W2)                | -          |                    |
| ⑧    | Guide arm assembly                         | T | M3   | -                   | 4          |                    |
| ⑨    | Pinch roller arm assembly                  | T | M3   | (W1)                | -          |                    |
| ⑩    | Cleaner arm assembly                       | T | M4   | (L5)                | 5          |                    |
| ⑪    | Slant pole arm assembly                    | T | M4   | (W1),(L6),(P1),(P2) | 26         |                    |
| ⑫    | Drum assembly                              | T | M4   | 3(S2)               | 6          |                    |
| ⑬    | Guide roller (S) assembly                  | T | M5   | (P3)                | 7,8        |                    |
| ⑭    | Rail assembly                              | T | M5   | 3(W1)               | 9,25       |                    |
| ⑮    | Slide deck assembly / ⑯ Main deck assembly | T | M6   | (W1),(L7)-(L10)     | 10,24      | (Adjustment)       |
| ⑰    | Slide deck assembly                        |   |      |                     |            |                    |
| ⑱    | Loading brake assembly                     | T | M7   | (W1),(L11),(P4)     | 23         | Adjustment         |
| ⑲    | Guide pin (SUPPLY)                         | T | M7   | (S2)                | -          |                    |
| ⑳    | Pad arm assembly                           | T | M7   | (W1),(L12),(P5)     | 22         |                    |
| ㉑    | Slide guide plate assembly                 | T | M7   | (S3)                | 21         | Adjustment         |
| ㉒    | Collar                                     | T | M7   | -                   | 11         |                    |
| ㉓    | Collar                                     | T | M7   | -                   | 11         |                    |
| ㉔    | Sub brake assembly                         | T | M7   | (W1),(L13),(P6)     | 20         |                    |
| ㉕    | Control plate assembly                     | T | M7   | 2(W1),(L14),(P7)    | 20         |                    |
| ㉖    | Main deck assembly                         |   |      |                     |            |                    |
| ㉗    | Tension lever assembly                     | T | M8   | -                   | 19         |                    |
| ㉘    | Slide lever assembly                       | T | M8   | -                   | 18         |                    |
| ㉙    | Brake control lever assembly               | T | M8   | -                   | 17         |                    |
| ㉚    | Loading guide                              | T | M9   | (S2)                | -          |                    |
| ㉛    | Timing belt                                | T | M9   | -                   | 16         |                    |
| ㉜    | Center gear assembly                       | T | M9   | -                   | -          |                    |
| ㉝    | Motor bracket assembly                     | T | M9   | 2(S2)               | 12         |                    |
| ㉞    | Worm wheel                                 | T | M9   | (W1)                | -          | (Phase adjustment) |
| ㉟    | Gear holder                                | T | M9   | (S2)                | -          |                    |
| ㊱    | Main cam gear                              | T | M10  | (S2)                | 15         | Phase adjustment   |
| ㊲    | Brake control plate                        | T | M10  | (L15)               | 15         | Phase adjustment   |
| ㊳    | Rotary encoder                             | T | M10  | (S2),(W1)           | 13         | Phase adjustment   |
| ㊴    | Connect gear                               | T | M10  | (W1)                | -          | (Phase adjustment) |
| ㊵    | Reel drive pulley assembly                 | T | M10  | (W2)                | -          |                    |
| ㊶    | Catcher (T) assembly                       | T | M11  | 2(S2)               | -          |                    |
| ㊷    | Capstan motor                              | T | M11  | 2(S2)               | -          |                    |
| ㊸    | Charge arm assembly                        | T | M11  | (W1)                | 14         |                    |
| ㊹    | Sub cam gear                               | T | M11  | (S2)                | -          | Phase adjustment   |
| ㊺    | PWB holder                                 | B | M11  | 2(S2)               | -          |                    |

Table 2-2-2



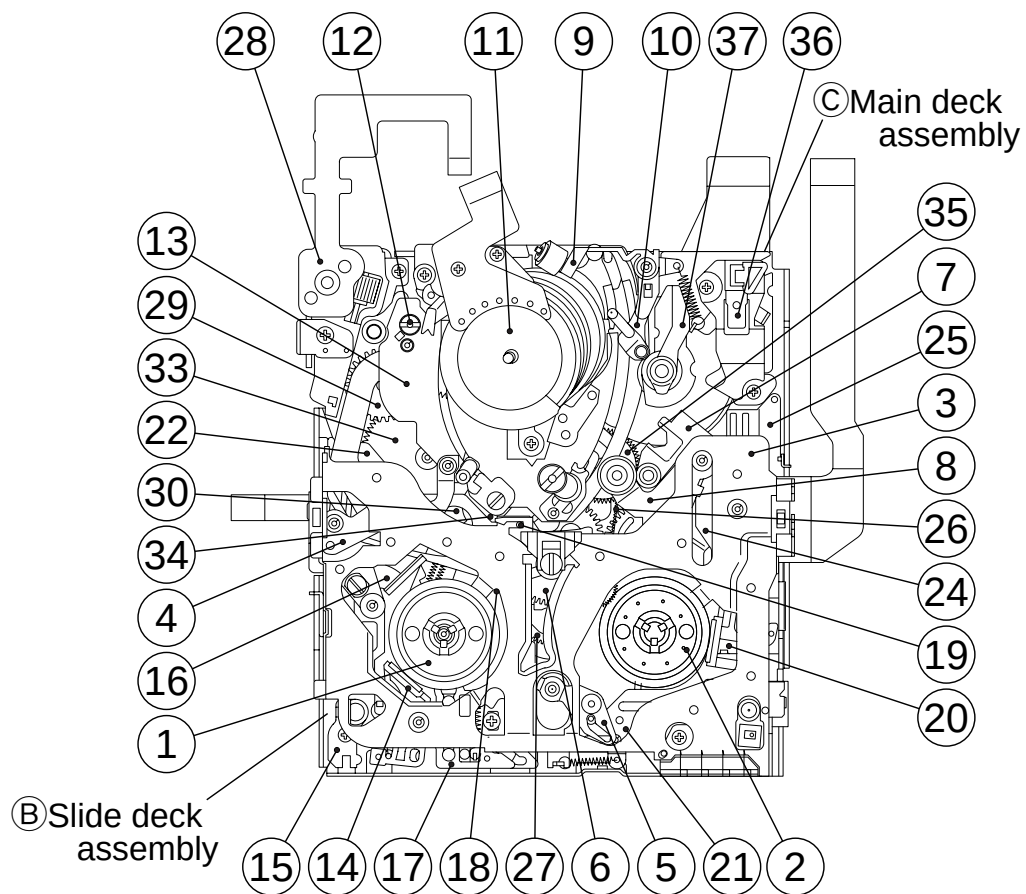


Fig. 2-2-10 Top view

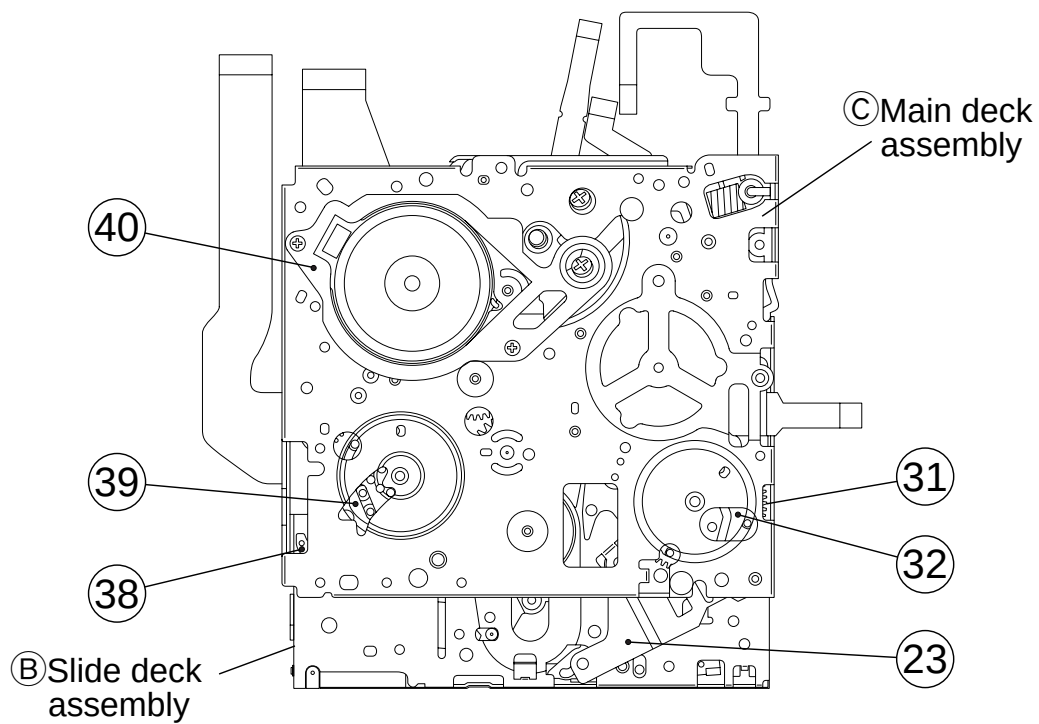


Fig. 2-2-11 Bottom view

## 2.2.5 Disassembling/reassembling

### 1. ① Cassette housing assembly

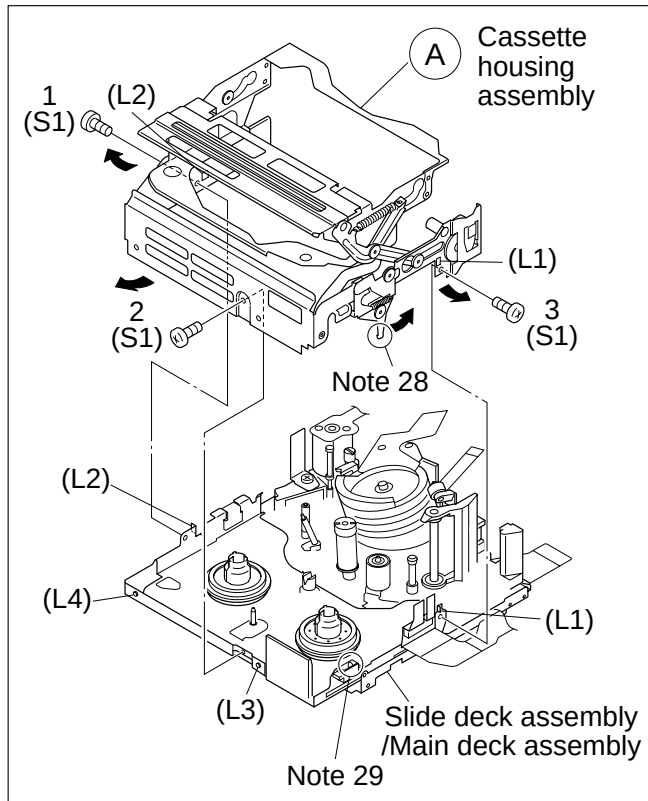


Fig. M1

2. ① Reel disk (SUP) assembly
- ② Reel disk (TU) assembly
- ③ Reel cover assembly

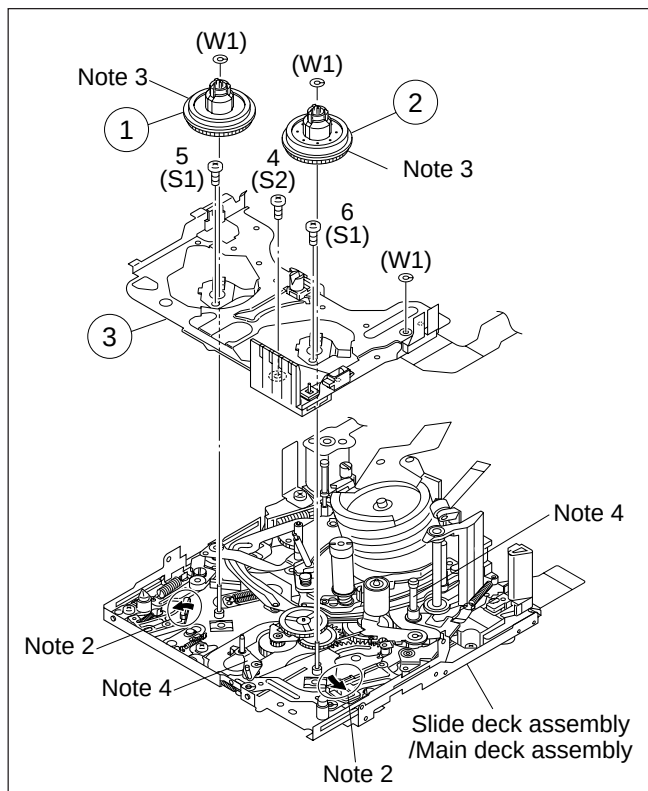
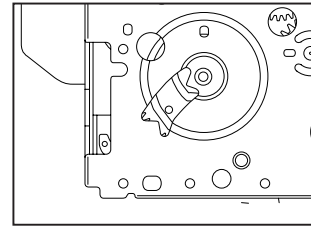
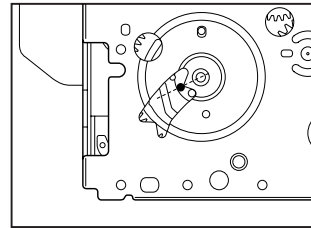


Fig. M2

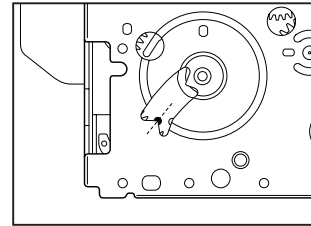
<STOP mode>



<EJECT mode>



<PLAY mode>



#### Note 1:

Shift the mechanism mode from the STOP mode to the EJECT mode.

#### Note 28:

Reassemble the cassette housing assembly to the mechanism as the cancel lever is moved in the direction of the arrow.

#### Note 29:

When reassembling the cassette housing to the mechanism, make sure that there is no deformation in the frame or no damage to the switches, etc.

#### Note 30:

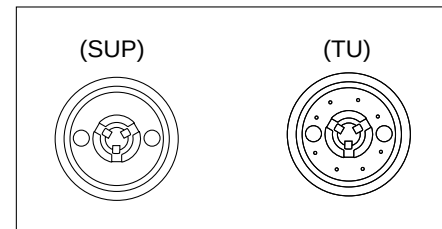
After reassembling the component parts, check the mechanism operation in the PLAY mode. For details of checking method, refer to "2.2.8 Reassembling slide deck assembly and main deck assembly".

#### Note 2:

When removing the reel disk assembly, be careful not to break the brake pad which applies lateral pressure to the reel disk.

#### Note 3:

Be careful not to make a mistake in installing the reel disk. The SUP reel disk and TU reel disk can be distinguished from each other by the appearance as shown below.



#### Note 4:

When removing the reel cover assembly, pay heed to the guide arm assembly. For, the guide arm assembly is just inserted into the slide deck assembly from the upside and it is apt to come off after the reel cover assembly is removed.

3. ④ Tension arm assembly/ ⑤ Release guide assembly  
 ⑥ Idler arm assembly/ ⑦ Guide arm assembly  
 ⑧ Pinch roller arm assembly

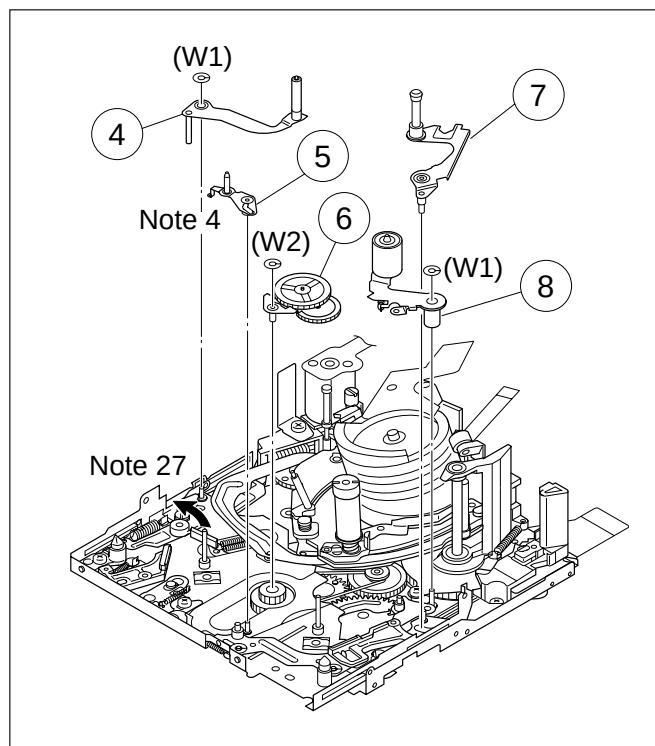


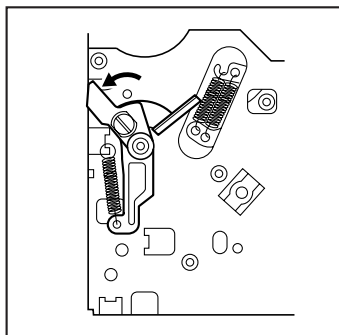
Fig. M3

**Note 4:**

When removing the reel cover assembly, pay heed to release guide assembly and guide arm assembly. For, the guide arm assembly is just inserted into the slide deck assembly from the upside and it is apt to come off after the reel cover assembly is removed.

**Note 27:**

Reassemble the tension arm assembly to the mechanism as the pad arm assembly is moved to the extent in the direction of the arrow.



4. ⑨ Cleaner arm assembly/ ⑩ Slant pole arm assembly  
 ⑪ Drum assembly

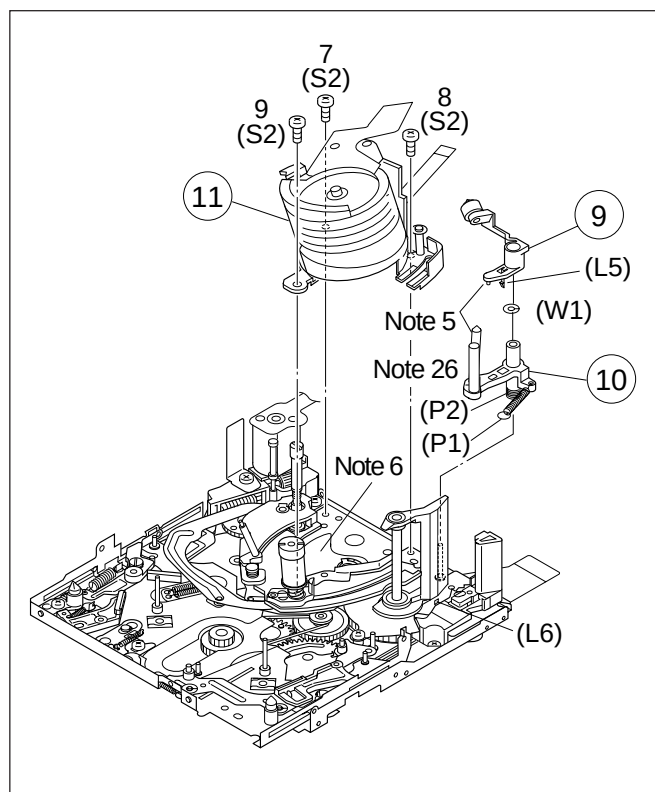


Fig. M4

**Note 5:**

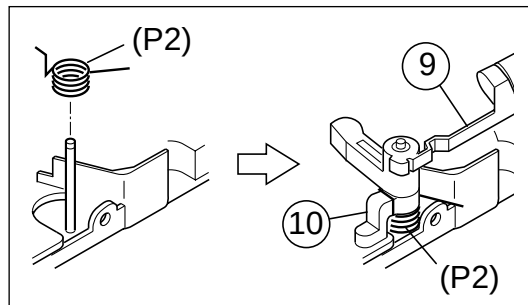
When removing the cleaner arm assembly, it is recommended to remove the slant pole arm assembly together with it except the case of a single unit replacement, because the hook (L5) is hard to disengage.

**Note 6:**

When the shield is applied, carefully remove the drum final assembly because the drum is stuck to the shield.

**Note 26:**

How to set the coil spring (P2).



## 5. ⑫ Guide roller (SUPPLY) assembly/ ⑬ Rail assembly

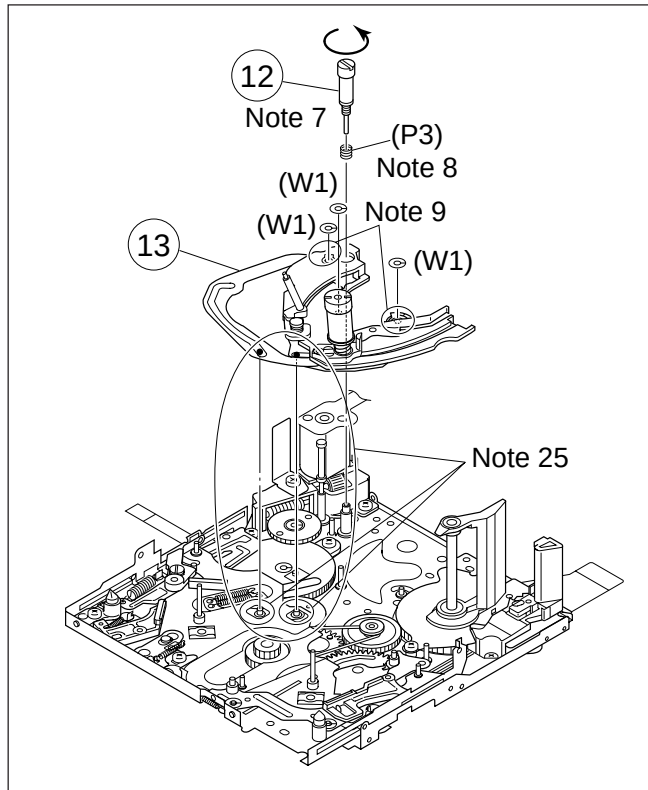


Fig. M5

### Note 7:

When removing the rail assembly, remove the guide roller (SUPPLY) assembly beforehand.

### Note 8:

Pay careful attention to the spring not to lose it.

### Note 9:

Pay careful attention to the engagement of the rail assembly's arm ends because they easily come off the engagement. Moreover, make sure that there is neither deformation nor damage observed in them.

### Note 25:

When removing the rail assembly, check to see if the collar is securely set in the arm groove.

## 6. ⑮ Slide deck assembly/ ⑯ Main deck assembly

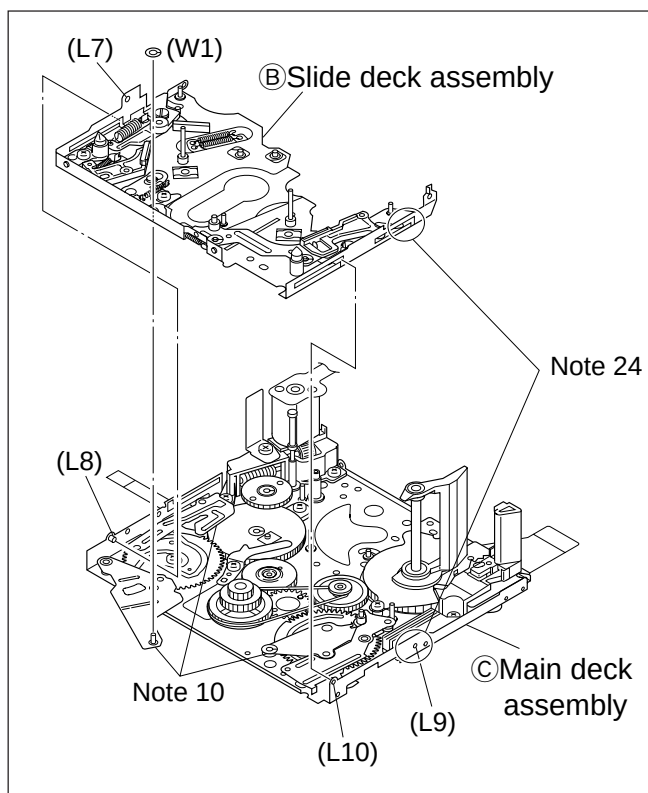


Fig. M6

### Note 10:

When removing the slide deck assembly, pay heed to the three components of the following because they are apt to come off after the slide deck assembly is removed.

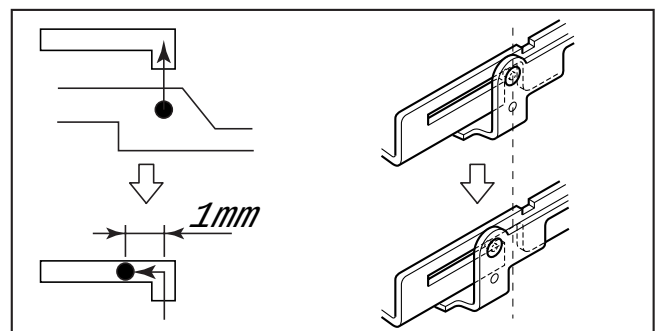
⑫ Tension lever assembly/ e Slide lever assembly

⑭ Brake control lever assembly

For reassembling those components, refer to Fig. M8 on page 2-10.

### Note 24:

When reassembling the slide deck assembly to the main deck assembly, combine them with each other by the side grooves and then slide the slide deck assembly by 1 mm or so.



7. ⑭ Loading brake assembly/ ⑮ Guide pin (S)  
 ⑯ Pad arm assembly/ ⑰ Slide guide plate assembly  
 ⑱ Collar/ ⑲ Collar/ ⑳ Sub brake assembly  
 ㉑ Control plate assembly

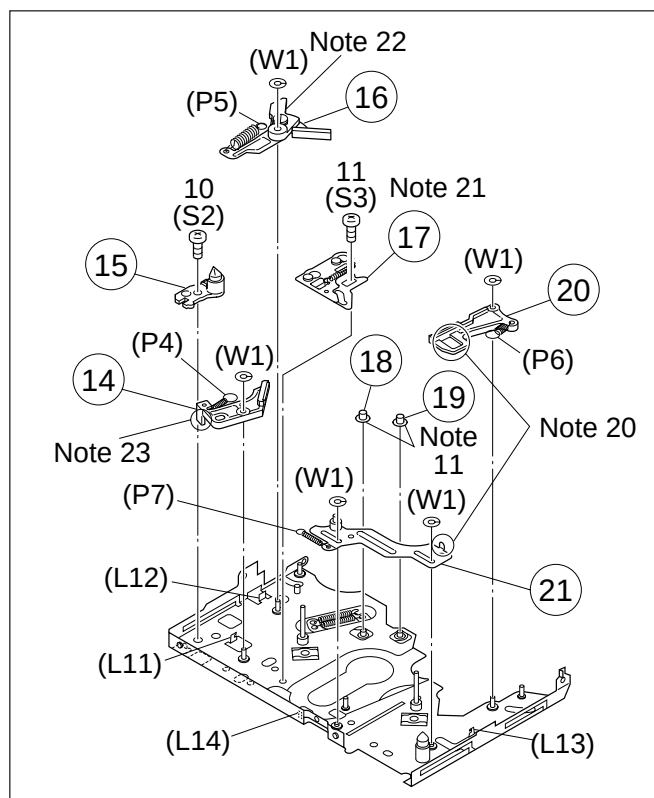


Fig. M7

8. ㉒ Tension lever assembly/ ㉓ Slide lever assembly  
 ㉔ Brake control lever assembly

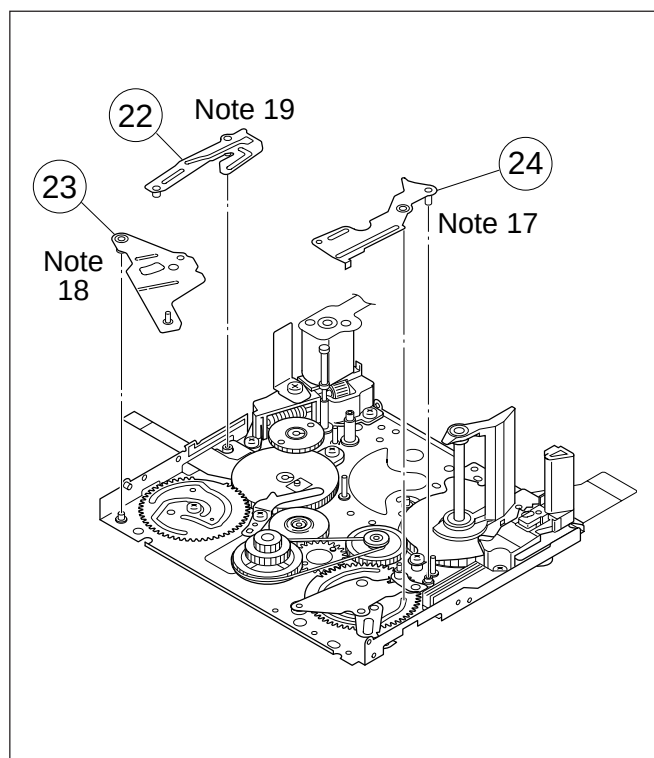


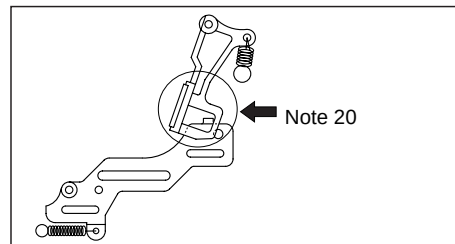
Fig. M8

**Note 11:**

*Don't remove these parts unreasonably. If they are removed for some reason, be very careful not to lose them.*

**Note 20:**

*When reinstalling the sub brake assembly, set the control plate assembly so that its hook is set in the # part of the sub brake assembly.*



**Note 21:**

*Since the slide guide plate assembly controls the slide deck assembly so that it exactly slides the main deck assembly, it must exactly be assembled in the PLAY mode. Therefore, temporarily fix the slide guide plate assembly in this stage. For details of reassembling procedure, refer to "2.2.8 Reassembling slide deck assembly and main deck assembly" on page 2-15.*

**Note 22:**

*The pad arm assembly controls the tension level of the tension arm assembly. For adjustment of the tension arm assembly, refer to page 2-8.*

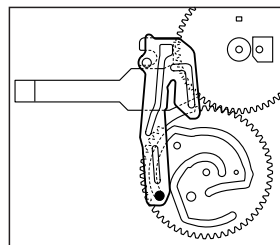
**Note 23:**

*When reinstalling the load brake assembly, slightly lift the slide deck assembly upwards because the lower part of the load brake assembly sticks out of the slide deck assembly.*

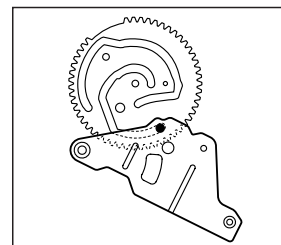
**Note 17, 18, 19:**

*For refitting the respective parts, refer to the following figures*

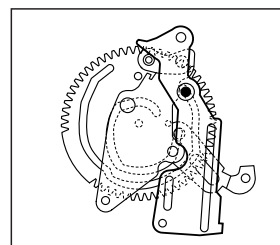
**㉒ Tension lever assembly**



**㉓ Tension lever assembly**



**㉔ Brake control lever assembly**





- 
- This diagram shows the exploded view of the upper mechanism assembly. Key components and their assembly points are indicated by callouts and leader lines:
- 26**: A long, thin, curved component (likely a spring or lever arm) that fits into the top of the main assembly.
  - 27**: A circular component with a central pin, which fits into the top of the main assembly.
  - 28**: A small component that fits into the top of the main assembly.
  - 14 (S2)**: A small component that fits into the top of the main assembly.
  - 13 (S2)**: A small component that fits into the top of the main assembly.
  - 15 (S2)**: A small component that fits into the top of the main assembly.
  - 30**: A small component that fits into the top of the main assembly.
  - (W1)**: A circular component with a central pin, which fits into the top of the main assembly.
  - 29**: A small component that fits into the top of the main assembly.
  - 12 (S2)**: A small component that fits into the top of the main assembly.
  - 25**: A small component that fits into the top of the main assembly.
- Notes 16 and 12 are also present, pointing to specific areas of the assembly.

This diagram illustrates the assembly of the upper components of the device. The parts are numbered as follows:

- 31**: A gear with a central shaft hole.
- 32**: A circular plate with a central hole and four smaller holes.
- 33**: A circular plate with a central hole and a small rectangular feature.
- 34**: A circular plate with a central hole.
- 35**: A circular plate with a central hole.

The assembly sequence is indicated by the labels (W1), (W2), and (S2):

- (W1)**: Indicates the first assembly step, where component 33 is placed on the base plate.
- (W2)**: Indicates the second assembly step, where component 35 is placed on top of component 33.
- (S2)**: Indicates the third assembly step, where component 31 is placed on top of component 35.

Additional labels include:

- Note 13**: Points to a specific feature on the base plate.
- Note 15**: Points to a specific feature on the base plate.
- (L15)**: Points to a specific feature on the base plate.

2-11



11. ③⑥ Catcher (T) assembly/ ③⑦ Capstan motor  
 ③⑧ Charge arm assembly/ ③⑨ Sub cam gear  
 ④⑩ PWB holder

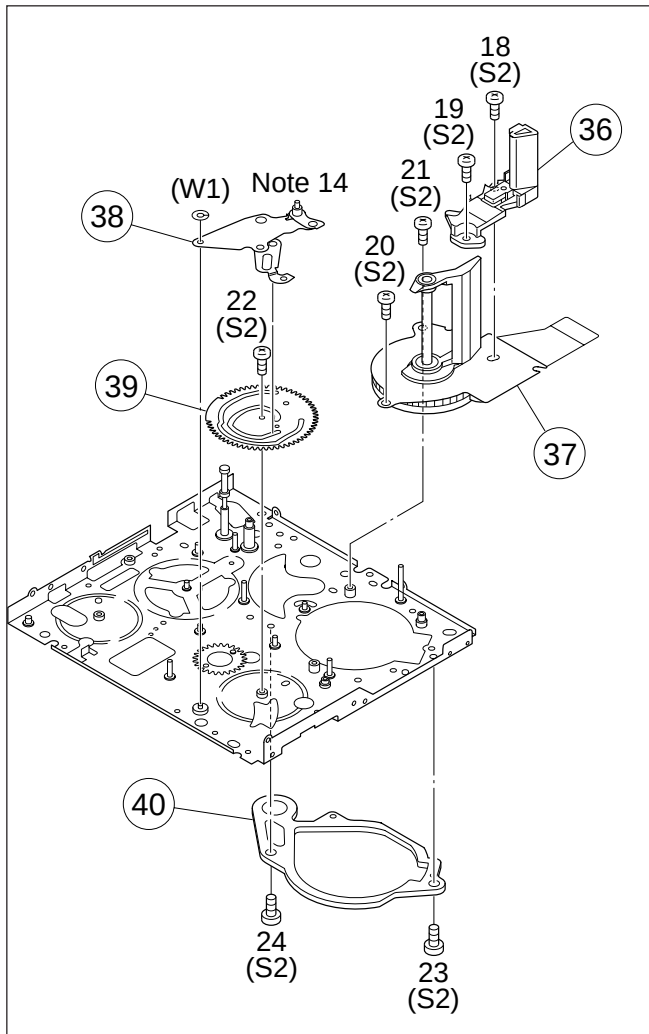
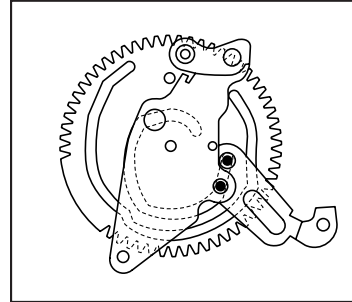


Fig. M11

**Note 14:**

The following figure shows how to put the charge arm assembly and sub cam gear assembly together.



## 2.2.6 List of procedures for disassembly

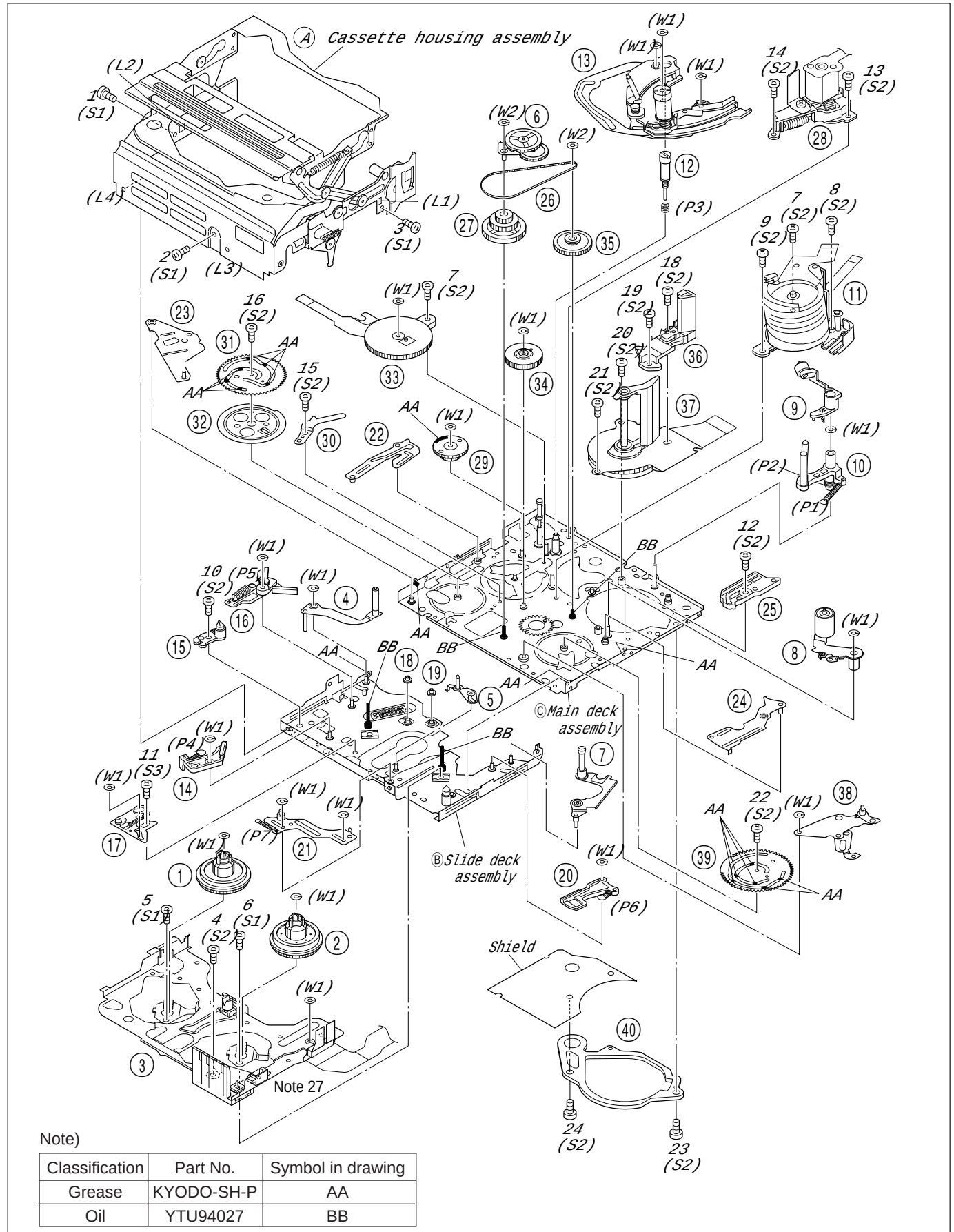
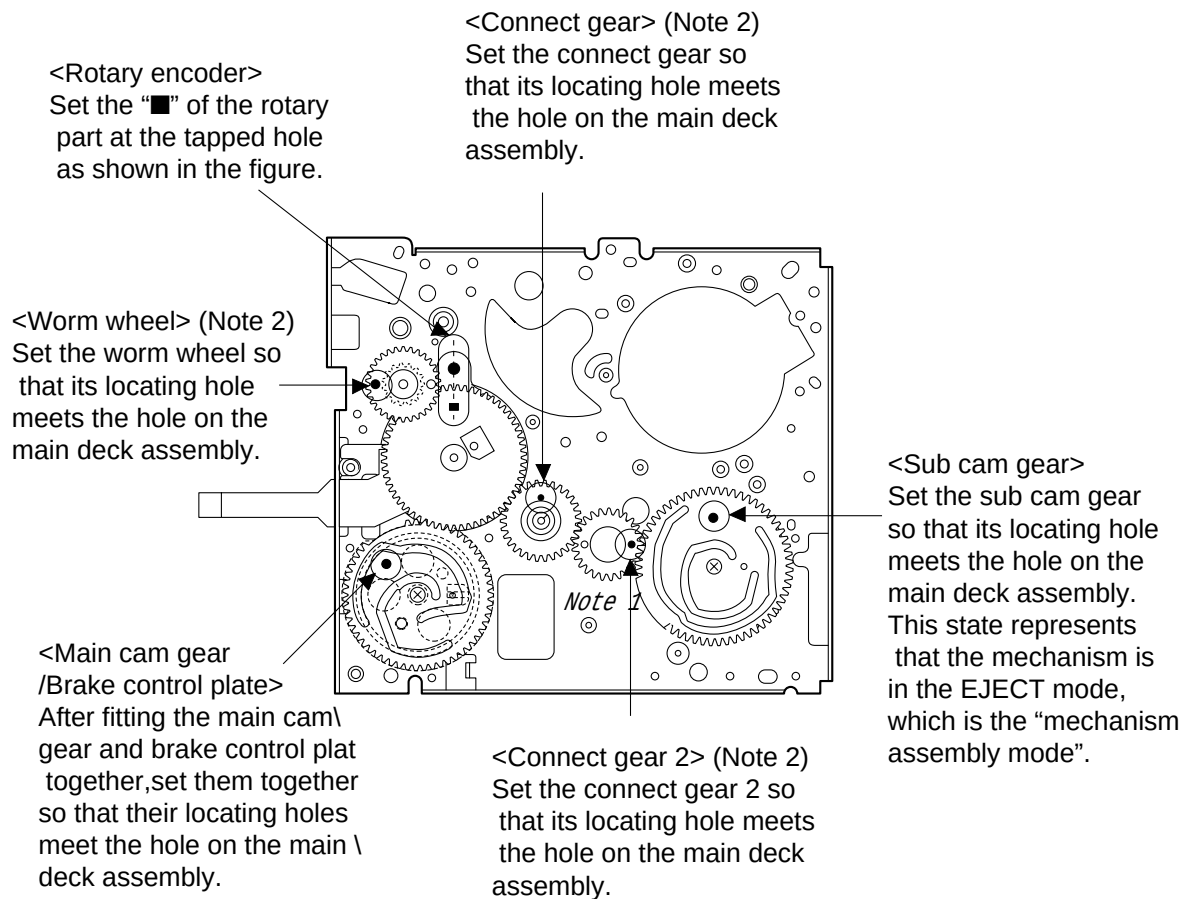


Fig. 2-2-12

## 2.2.7 Checkup and adjustment of mechanism phase



### Note 1:

Since the connect gear 2 is tightly fixed to the main deck by caulking, adjust its phase with the connect gear and sub cam gear.

### Note 2:

The part that needs phase adjustment by the hole on the main deck assembly must exactly be set as the specified phase. There is a fear that some part is installed in a wrong phase because assembling of the mechanism is automated. If so, set every part in the correct phase whenever the mechanism is reassembled.

Fig. 2-2-13

### 2.2.8 Reassembling slide deck assembly and main deck assembly

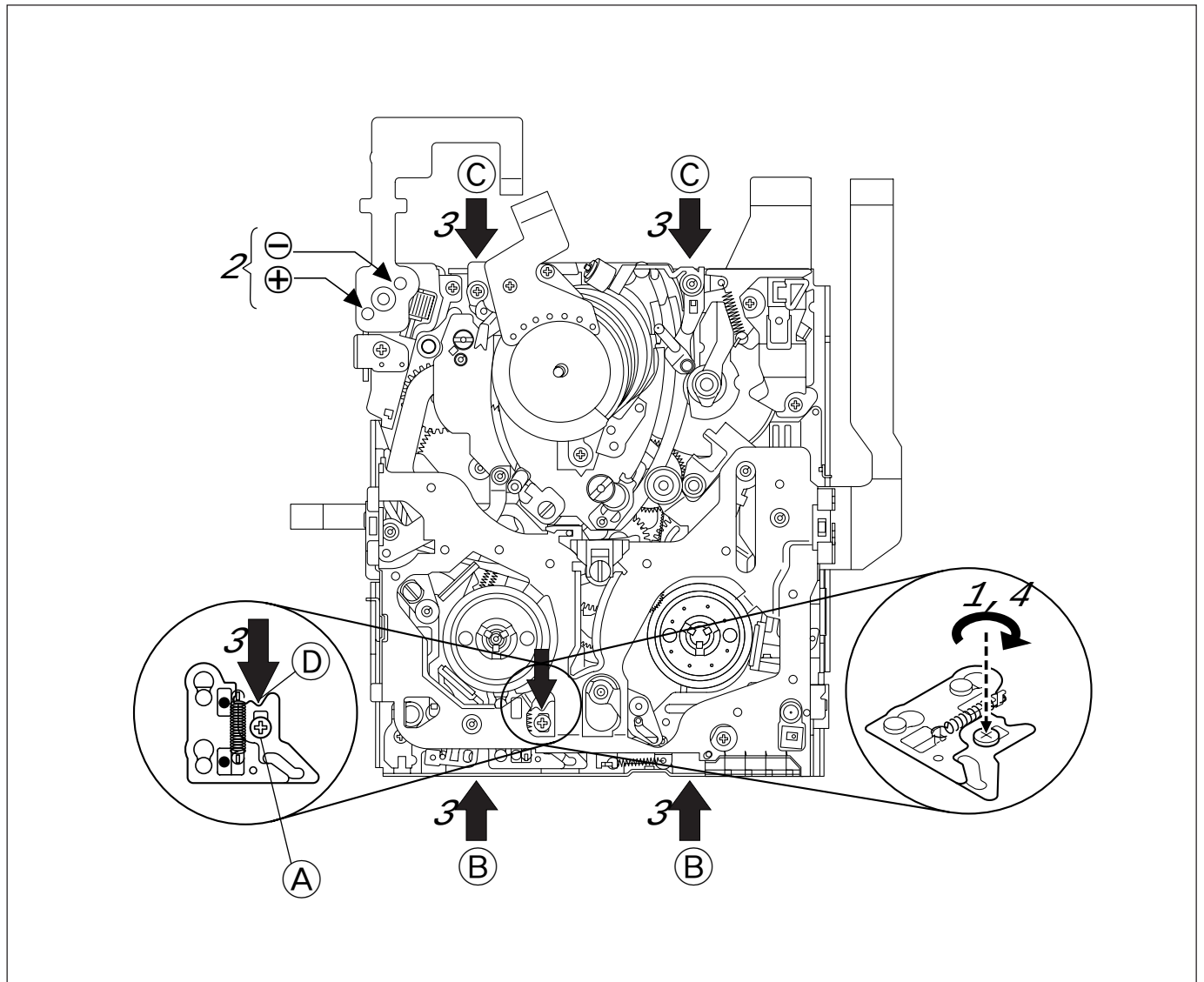


Fig. 2-2-14

#### Reassembling procedure

1. Loosen the screw (A).
2. Set the mechanism in the PLAY mode. (Refer to page 2-2.)
3. Press the end face B of the slide deck assembly (reel disk side) and the end face (C) of the main deck assembly (drum assembly side) with uniform force so that the two assemblies are tightly pressed to each other. Furthermore, press the part (D) and tighten the screw (A).

**Note :** Tightening torque for screw (A): 0.03 N·m (0.3 kgf·cm)

### 2.2.9 Locating tension pole

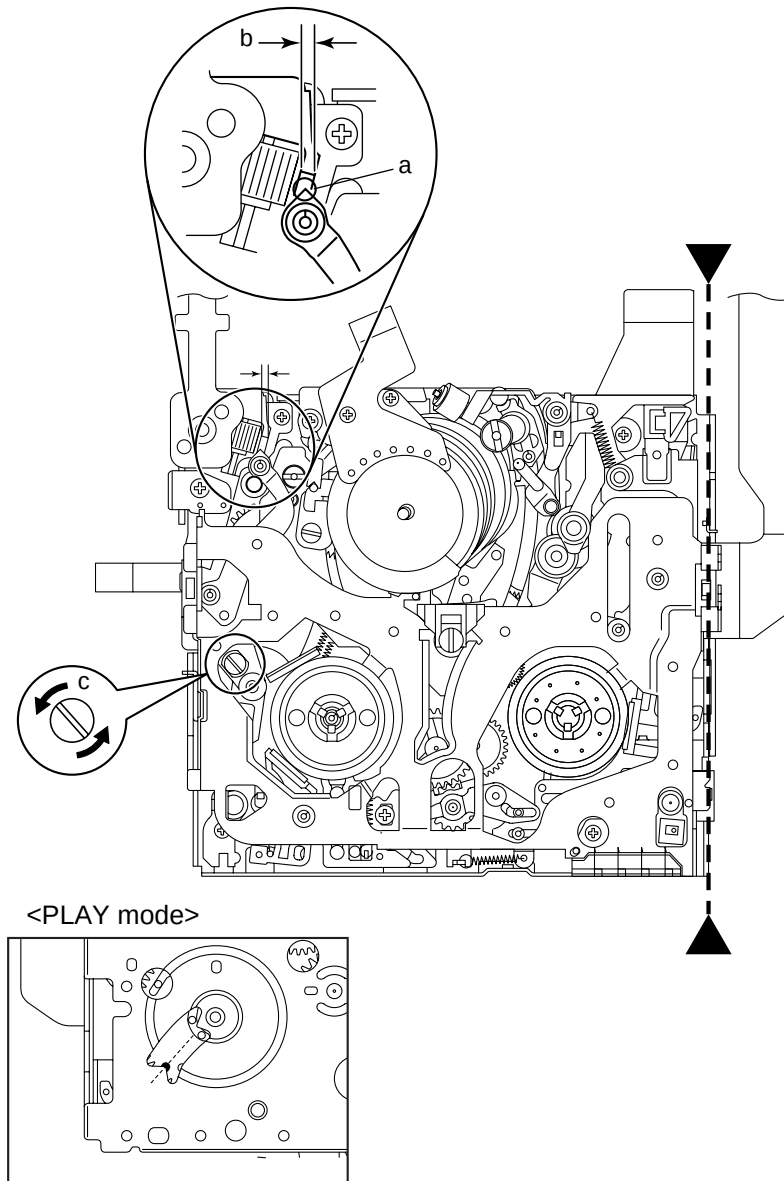


Fig. 2-2-15

#### Locating procedure

1. Enter the mechanism assembly into the PLAY mode. (Refer to page 2-2.)
2. When the “▶-----◀” part is positioned down, make sure that the part “a” of the tension arm assembly is located within the range of “b”.
3. If the part “a” is out of the range, turn the pin “c” to adjust the position.

## 2.3 PROCEDURE OF COMPATIBILITY AND P.B. EQ. (ERROR RATE) ADJUSTMENTS

### 2.3.1 Precautions

Prior to starting disassembling and adjusting work, be sure to make a backup copy of the data stored in the EEPROM (IC1003 on the MAIN board) for the "EEPROM utility" of the SSS software.

Table 2-3-1 shows important service points for adjustment of P.B. EQ. (error rate).

| Adjustment item<br>Service point                        | Linearity<br>adjustment    | P.B. Switching<br>Point<br>adjustment | Head Recording<br>Current<br>adjustment | Error rate<br>(P.B. EQ).<br>adjustment<br>(SP/LP) |
|---------------------------------------------------------|----------------------------|---------------------------------------|-----------------------------------------|---------------------------------------------------|
| Replacement of<br>DRUM                                  | Necessary<br><b>Note 1</b> | Necessary                             | Necessary                               | Necessary                                         |
| Replacement of parts of<br>tape transport system        | Necessary<br><b>Note 1</b> | Unnecessary                           | Unnecessary                             | Check                                             |
| Repair of parts of tape<br>transport system<br>(DRUM)   | Necessary<br><b>Note 1</b> | Unnecessary                           | Unnecessary                             | Check                                             |
| Replacement of IC3501<br>(SECOND board,<br>PRE/REC amp) | Unnecessary                | Unnecessary                           | Necessary                               | Check                                             |
| Replacement of MAIN<br>BOARD<br><b>Note 2</b>           | Unnecessary                | Necessary                             | Necessary                               | Necessary                                         |

Table 2-3-1

**Note 1:** Linearity adjustment is needed only after replacement of the drum or replacement/repair of the TU/SUP guide rail.

**Note 2:** After replacement of the MAIN board, be sure to write the original data on the EEPROM of the new MAIN board. After data writing, adjust the camera section. When the MAIN board is replaced for the reason of communication failure, install the original EEPROM on the new MAIN board.

If adjustment is needed for two or more items, proceed in adjustment of respective items in the following order.

#### 2.3.3 Linearity adjustment

#### 2.3.4 PB switching point adjustment

#### 2.3.5 Head REC current adjustment

#### 2.3.6 P.B. EQ. (error rate) adjustment (both in SP and LP)

### 2.3.2 Adjustment standard

**Note :** For details of the test instruments, tools and jigs required for adjustment, refer to pages 1-2, 1-3 and 2-1 of this manual.

1. Remove the cover (CC).

**Note :** Carefully remove the cover not to scratch the exterior of the camera. Since the cover (CC) shall be restored to the original position after adjustment, be very careful not to soil its adhesive surface.

2. Open the monitor assembly. Remove two screws (1, 2) and then remove the upper case (2).

3. Remove one screw (3) and then remove the cover (jig).

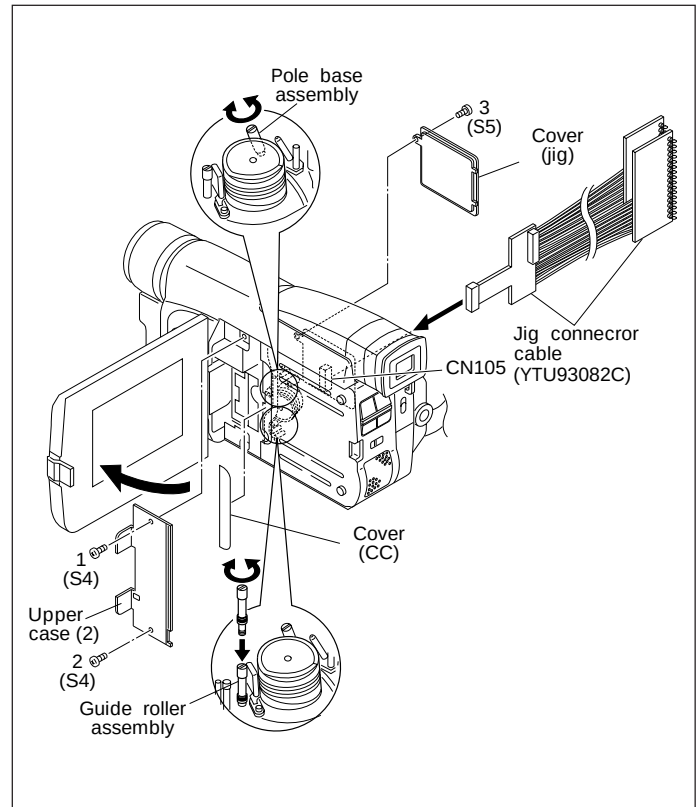


Fig. 2-3-1



### 2.3.3 Linearity adjustment

Procedure of linearity adjustment is shown by the following flowchart.

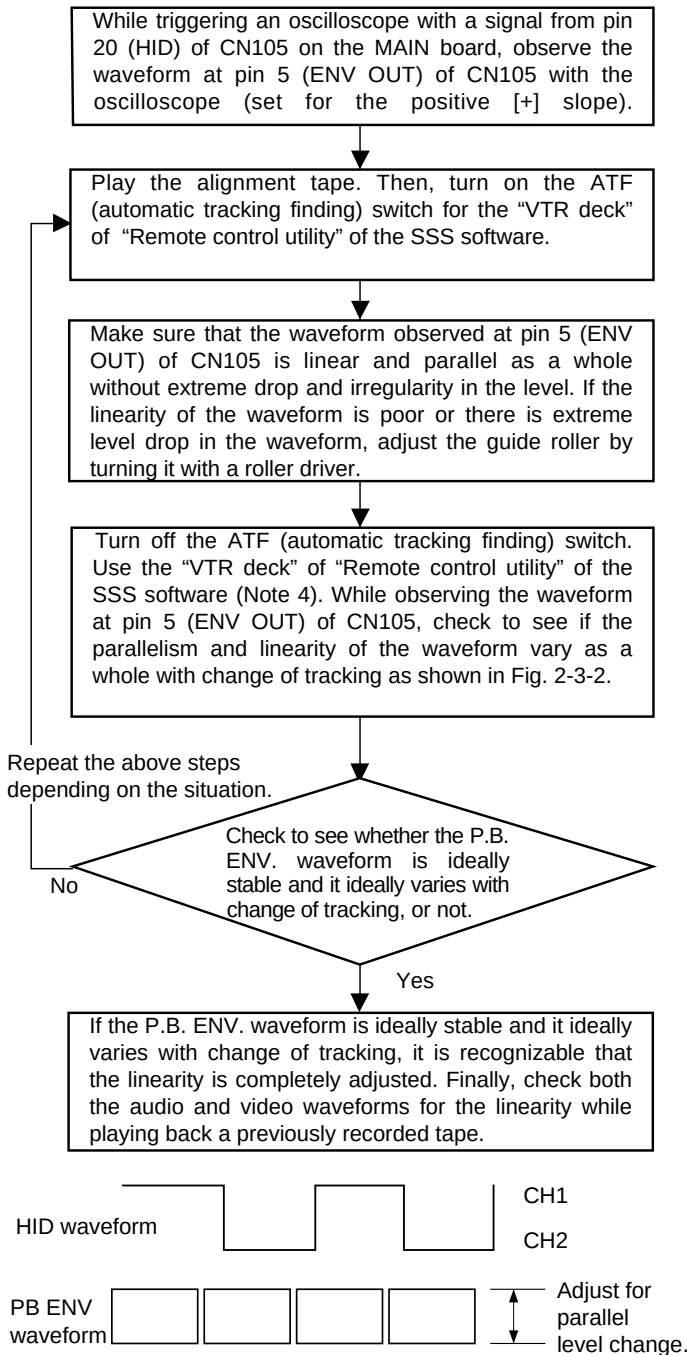


Fig. 2-3-2

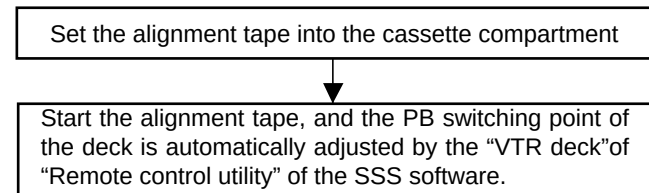
**Note 3:** In case of the VHS tape recorder, the first tracking point can be locked by means of CTL pulse and DRUM FF when the automatic tracking (AT) function is off, because the VHS tape recorder has an A/C head. Therefore, the linearity of the VHS tape recorder is adjustable even when the AT is off.  
On the other hand, the linearity of the DVC cannot be adjusted when the automatic tracking finding (ATF) function is inactivated, because the DVC has no A/C

head. When the ATF of the DVC is off, its tracking operation is effectuated only for the speed control system. Therefore, as time elapses, the DVC gradually fails in the servo control and it becomes hard to adjust the linearity.

**Note 4:** In practice, if linearity adjustment is performed within a few minutes after the ATF is switched off, the state (ATF off) may be left out of consideration, because the speed servo of the DVC functions when the ATF is off.

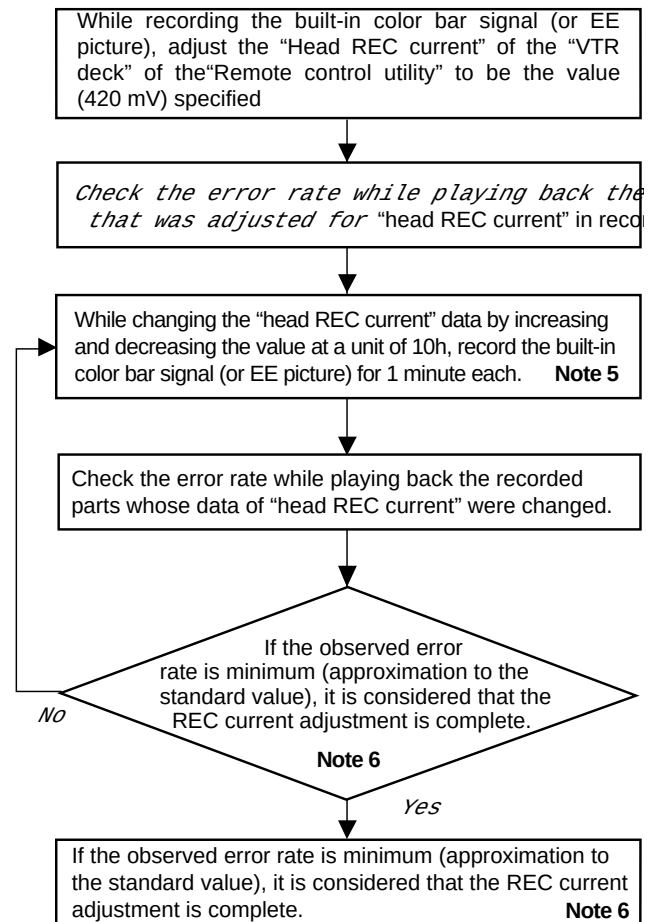
### 2.3.4 PB switching point adjustment

Procedure of PB switching point adjustment is shown by the following flowchart.



### 2.3.5 Head REC current adjustment

Procedure of head REC current adjustment is shown by the following flowchart.



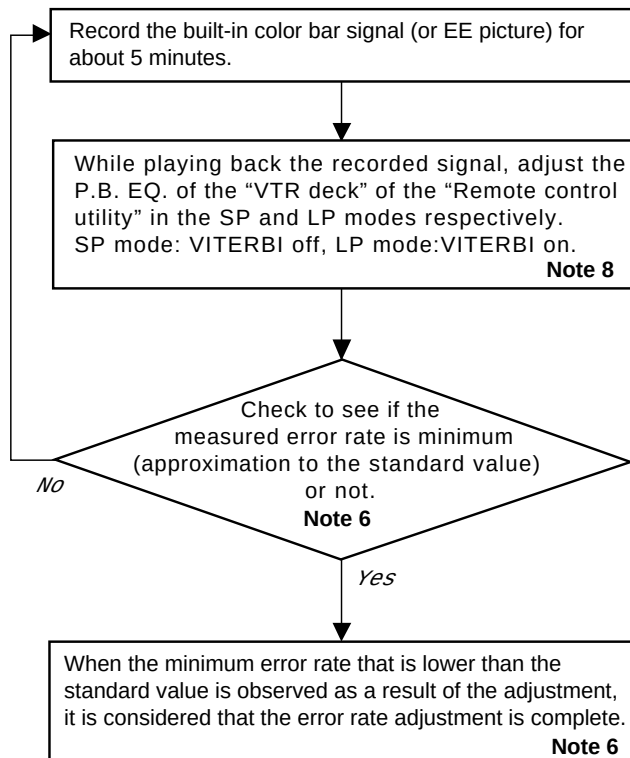
If the minimum error rate does not approximate to the standard value (see Note 7) in spite of repeated adjustments, clean the head and tape transport system. If cleaning has no effect on improvement of the error rate, it is thinkable that there is a failure in the head or the preamp shield, or the P.B. EQ. (error rate) is incompletely adjusted. In such the case, try to proceed in P.B. EQ. adjustment with the alignment tape prior to adjustment of "head REC current". In other words, if there is something abnormal in the playback system, the indication of the error rate is meaningless. Therefore, it is recommended to perform the "P.B. EQ. (error rate) adjustment" roughly with the alignment tape after completion of the "linearity adjustment" (to adjust error rate to be almost approximate to the standard value), because it facilitates the adjustment of the "head REC current".

**Note 5:** *The value of the "head REC current" specified on the software is not always optimum.*

**Note 6:** *In the strict sense of the word, "approximation to the standard value" means a value that is slightly lower than the specified value. Specified values are as follows.  
CH1 or CH2: Less than 1,500 (less than 3,000 in total of CH1 and CH2) with the VITERBI function off.  
Difference between channels: Less than 10 times between CH1 and CH2.*

### 2.3.6 P.B. EQ. (error rate) adjustment (for SP and LP)

Procedure of P.B. EQ. (error rate) adjustment is shown by the following flowchart.



**Note 7:** *It is advised to use a new cassette tape or an unrecorded part of a used cassette tape for recording. If a damaged tape is used for recording, it results not only in an error of the error rate measurement (measurement result becomes considerably higher than the real value) but also in loss of the reliability of adjustment.*

**Note 8:** *Switch off the VITERBI function in the playback mode, because it can be switched off in the playback mode only. If the VITERBI function is switched off in the playback mode, the switched-off status is automatically cancelled when playback is discontinued. Therefore, it is required to switch off the VITERBI function in every playback operation.*

### 2.3.7 Measurement method of P.B. EQ. (error rate)

Neither error rate jig (YTU93083) nor frequency counter is needed. Error rate is shown on the service support in three ways of video CH1, CH2 and total. When measuring error rate by channel, total the video and audio error rates on the same channel.

## 2.4 SERVICE NOTE

Use the following chart to manage mechanism parts that are removed for disassembling the mechanism.

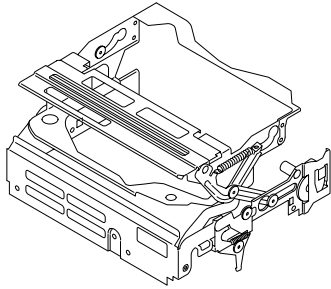
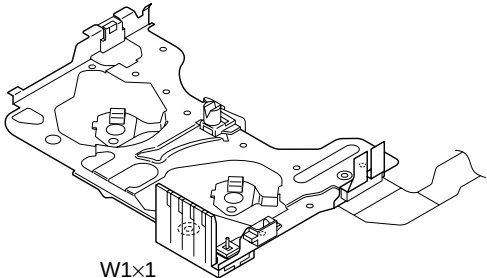
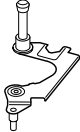
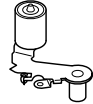
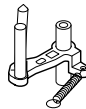
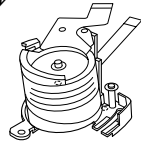
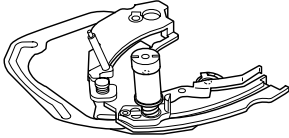
|   |                                                                                                                                    |                                                                                                                                                  |                                                                                                                            |                                                                                                                             |                                                                                                                                    |
|---|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 1 | ① Cassette housing assembly<br><br><br><br>S1×3  |                                                                                                                                                  |                                                                                                                            |                                                                                                                             |                                                                                                                                    |
| 2 | ① Reel disk (SUP) assembly<br><br><br><br>W1×1    | ③ Reel cover assembly<br><br><br><br>S1×2      S2×1      W1×1 |                                                                                                                            |                                                                                                                             |                                                                                                                                    |
|   | ② Reel disk (TU) assembly<br><br><br><br>W1×1     |                                                                                                                                                  |                                                                                                                            |                                                                                                                             |                                                                                                                                    |
| 3 | ④ Tension arm assembly<br><br><br><br>W1×1        | ⑤ Release guide assembly<br><br><br><br>W2×1                    | ⑥ Idler arm assembly<br><br><br><br>W2×1 | ⑦ Guide arm assembly<br><br><br><br>S2×1 | ⑧ Pinch roller arm assembly<br><br><br><br>W1×1 |
| 4 | ⑨ Cleaner arm assembly<br><br><br><br>W1×1       | ⑩ Slant pole arm assembly<br><br><br><br>W1×1 P1×1 P2×1       |                                                                                                                            |                                                                                                                             | ⑪ <i>Drum assembly</i><br><br><br><br>S2×3     |
| 5 | ⑫ Guide roller (S) assembly<br><br><br><br>P3×1 |                                                                                                                                                  |                                                                                                                            | ⑬ Rail assembly<br><br><br><br>W1×3    |                                                                                                                                    |

Table 2-4-1

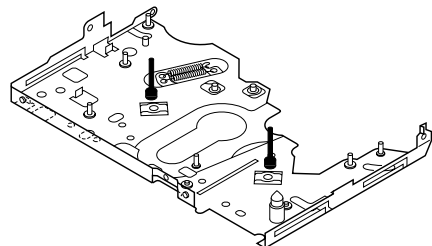
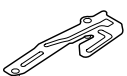
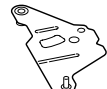
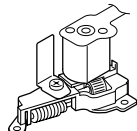
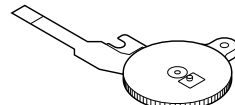
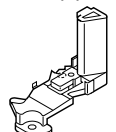
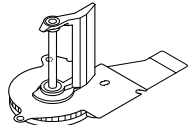
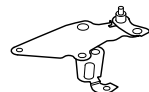
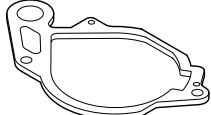
|    |                                                                                                                              |                                                                                                                       |                                                                                                             |                                                                                                                                      |                                                                                                                                    |                                                                                                                                     |                                                                                                                                      |
|----|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 6  | ⑧ Slide deck assembly<br><br><i>W1×1</i>    |                                                                                                                       | 7                                                                                                           | ⑭ Loading brake assembly<br><br><i>W1×1 @ @P4×1</i> | ⑮ Guide pin (SUPPLY)<br><br><i>S2×1</i>         | ⑯ Pad arm assembly<br><br><i>W1×1 @ @P5×1</i>    | ⑰ Slide guide plate assembly<br><br><i>S3×1</i>   |
|    |                                                                                                                              |                                                                                                                       | ⑱ Collar<br>               | ⑲ Collar<br>                                      | ⑳ Sub brake assembly<br><br><i>W1×1 @ @P6×1</i> | ㉑ Control plate assembly<br><br><i>W1×2 P7×1</i> |                                                                                                                                      |
| 8  | ㉒ Tension lever assembly<br>                |                                                                                                                       |                                                                                                             | ㉓ Slide lever assembly<br>                        |                                                                                                                                    | ㉔ Brake control lever assembly<br>               |                                                                                                                                      |
| 9  | ⑲ Loading guide<br><br><i>S2×1</i>          | ⑳ Timing belt<br>                    | ㉑ Center gear assembly<br> | ㉒ Motor bracket assembly<br><br><i>S2×2</i>       | ㉓ Worm wheel<br><br><i>W1×1</i>                 | ㉔ Gear holder<br><br><i>S2×1</i>                 |                                                                                                                                      |
| 10 | ㉑ Main cam gear<br><br><i>S2×1</i>        | ㉒ Brake control plate<br>          |                                                                                                             | ㉓ Rotary encoder<br><br><i>S2×1 W1×1</i>         |                                                                                                                                    | ㉔ Connect gear<br><br><i>W1×1</i>              | ㉕ Reel drive pulley assembly<br><br><i>W2×1</i> |
| 11 | ㉑ Catcher (T) assembly<br><br><i>S2×2</i> | ㉒ Capstan motor<br><br><i>S2×2</i> |                                                                                                             | ㉓ Charge arm assembly<br><br><i>W1×1</i>         | ㉔ Sub cam gear<br><br><i>S2×1</i>             | ㉕ PWB holder<br><br><i>S2×2</i>                |                                                                                                                                      |

Table 2-4-2

2.5 JIG CONNECTOR CABLE (YTU93082C) CONNECTION

Remove one screw (1) first and the ciover (JIG) next.

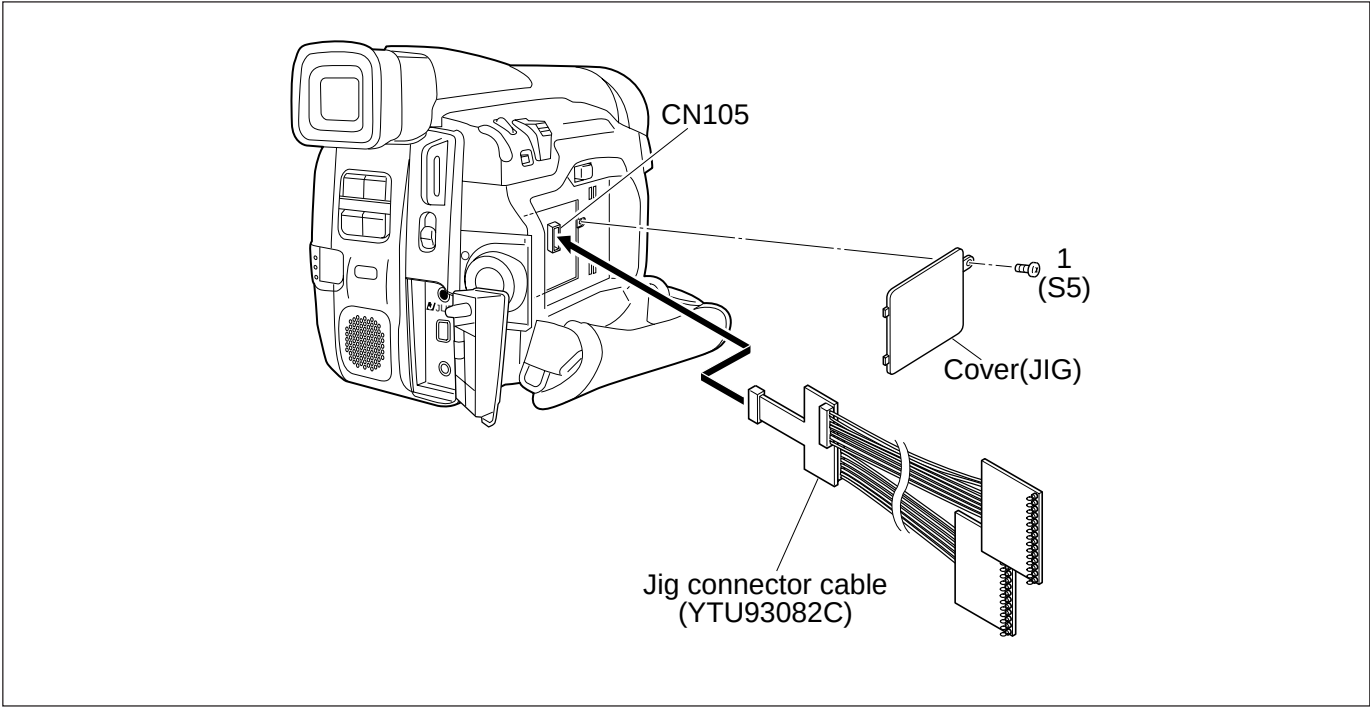


Fig. 2-5-1

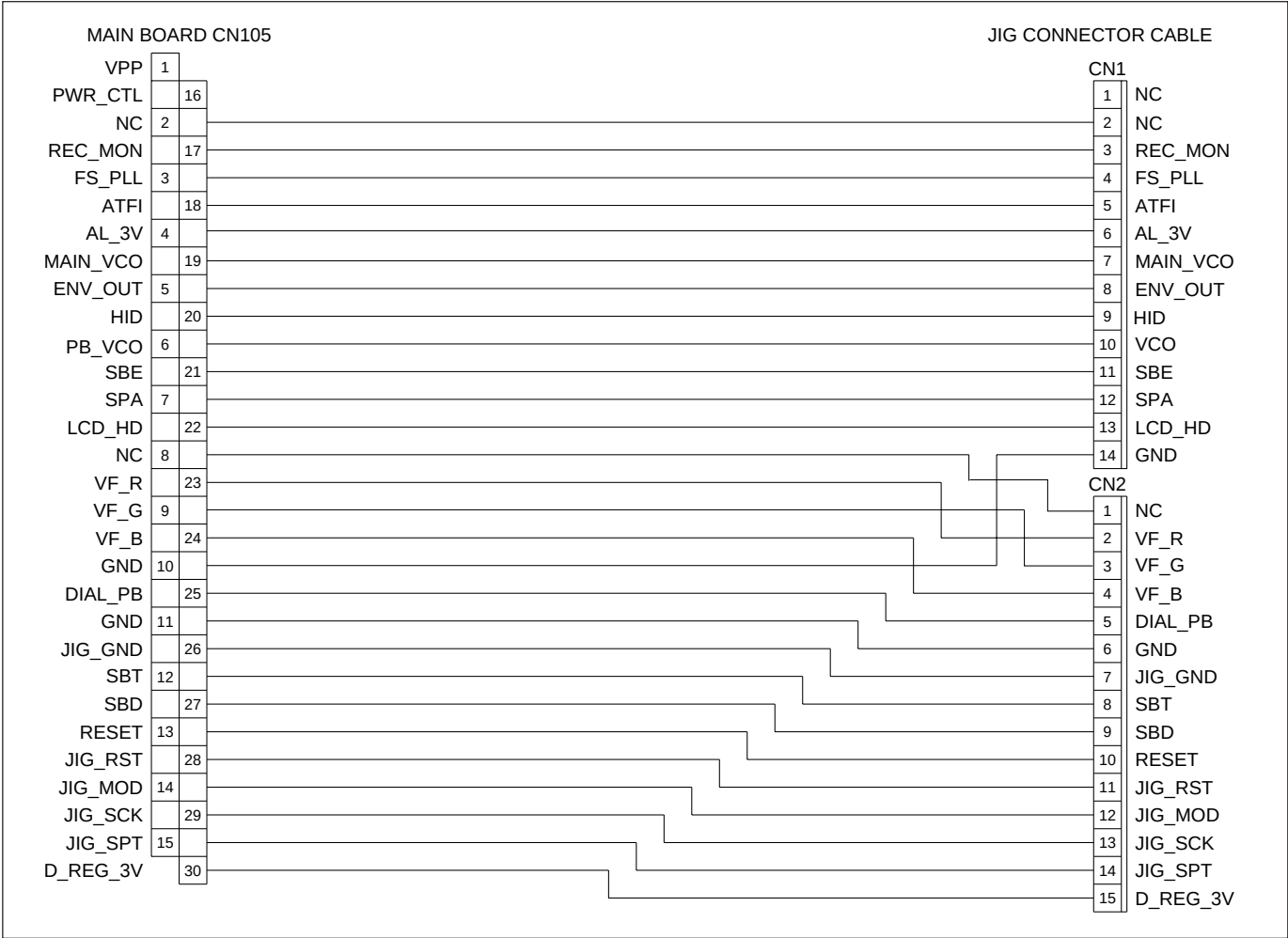


Fig. 2-5-2

## SECTION 3 ELECTRICAL ADJUSTMENT

### 3.1 PREPARATION

#### 1. Precaution

This model does not contain adjustment controls (VR). General deck system, camera system and monitor system adjustment are not required. However, if MAIN board and MONITOR board need replacement, please use original E<sup>2</sup>PROM on to new board. Then adjustment are not required. And if parts such as the following need replacement, special computerized adjustment are required (Refer to sec. 3.1.1-3). Please contact to JVC Service for detaile information.

- OP block
- E<sup>2</sup>PROM (IC1003 of MAIN board)
- MONITOR
- E<sup>2</sup>PROM (IC7603 of MONITOR board)

**Note:** For B/W VF assembly adjustment is needed VRs.

In the event of malfunction with electrical circuits, trouble-shooting with the aid of proper test instruments most be done first, and then commence necessary repair, replacement and adjustment, etc.

1. In case of wiring to chip test points for measurement, use IC clips, etc. to avoid any stress.
2. Since connectors are fragile, carefully handle them in disconnecting and connecting.
3. Shortcircuit between operation un it and DECK chassis.

#### 2. Required test equipment

1. Color TV monitor.
2. AC power adapter

3. Oscilloscope (dual-trace type, observable 100 MHz or higher frequency)

**Note:** It is recommended to use one observable 300 MHz or higher frequency.

4. Digital voltmeter
5. Frequency counter (with threshold level adjuster)
6. Personal computer

### 3. Required adjustment tools

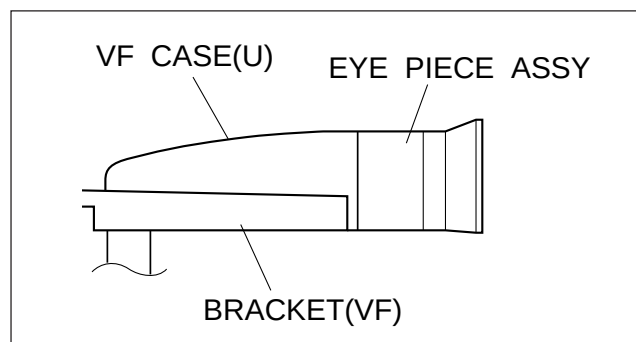
For details of special jigs necessary for adjustment, refer to page 1-2 and 1-3 of the Section 1.

### 3.2 E. VF SECTION ADJUSTMENT (B/W VF ONLY)

Referring to "SEC. 1 DISASSEMBLY" and connect the E.VF FPC to CN104 of the MAIN board.

**Note:** This adjustment can be carried out in the condition that only the exterior part (EYE PIECE ASSY, VF CASE [U]) is removed from the viewfinder.

With meticulous care not to damage any part, remove the VF case (U) and expose the VF board assembly by taking it out and carry out this adjustment using the patch cord for connection.



### 3.3 SETUP

1. Setup for electrical adjustment with personal computer

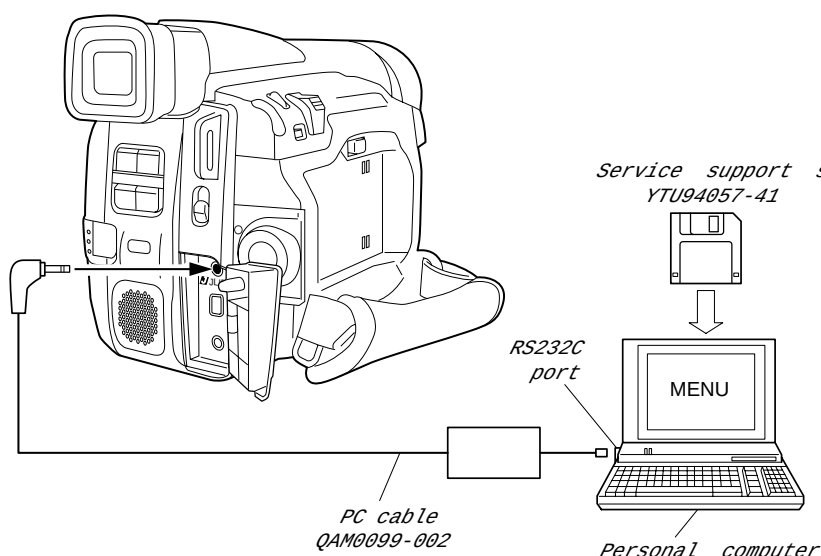


Fig. 3-3-1 Connection for Service support system (1)



2. Setup with patch cords and jig connector cables

NOTE:

Fig. 3-3-2 shows an example of expansion setup that facilitates inspection of major boards because main components are connected by means of patch cords and jig cables. For proceeding to electrical adjustment in such the setup, disassemble the set at a certain level required for the current adjustment objectives referring to the section 1 "DISASSEMBLY" and properly set up the expanded set and test instruments.

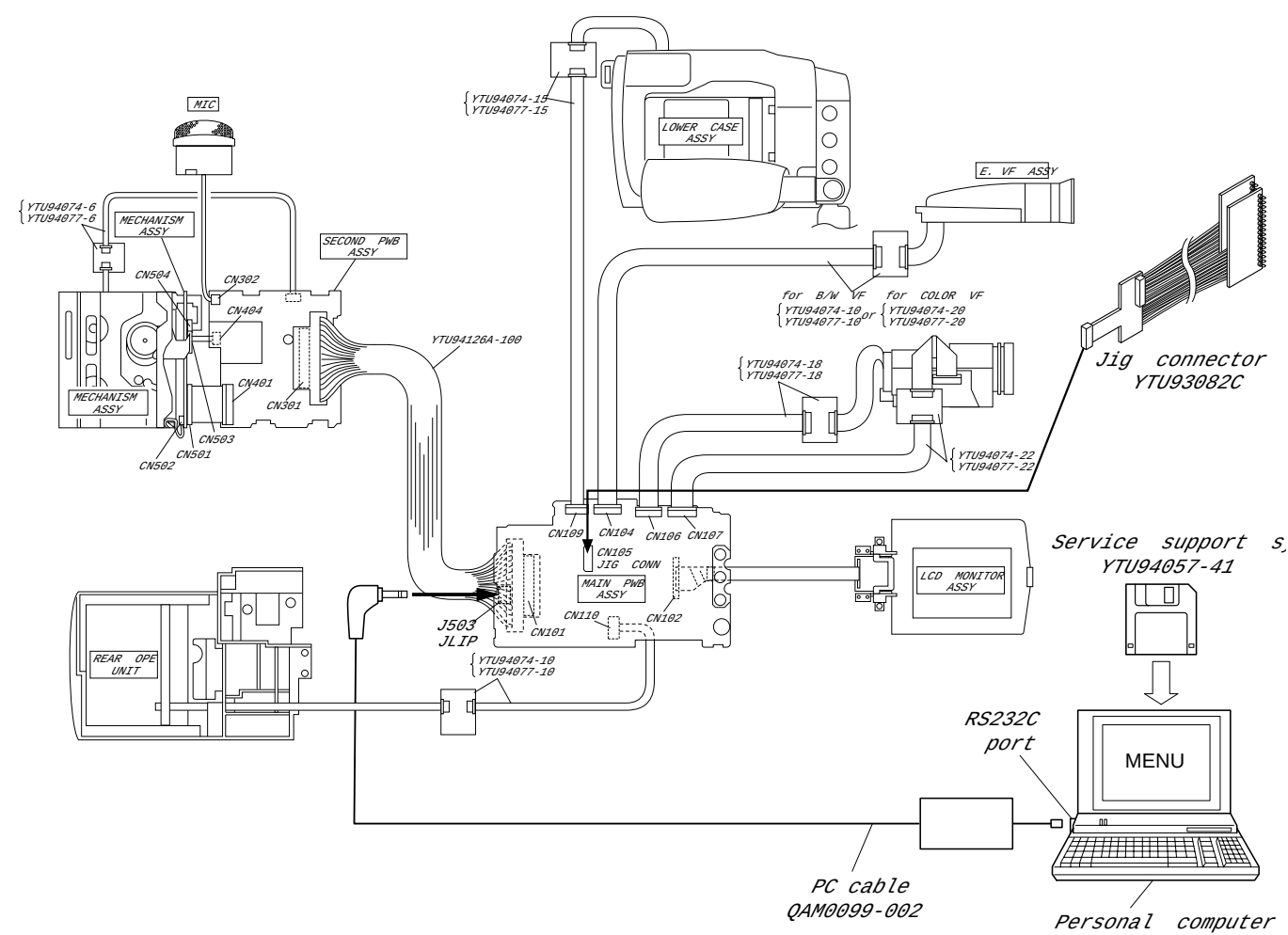


Fig. 3-3-2 Setup for electrical adjustment with personal computer (II)

3.4 ELECTRONIC VIEWFINDER (E. VF) ADJUSTMENT

Notes: Unless otherwise specified, all measurement points and adjustment parts are located on E. VF board.

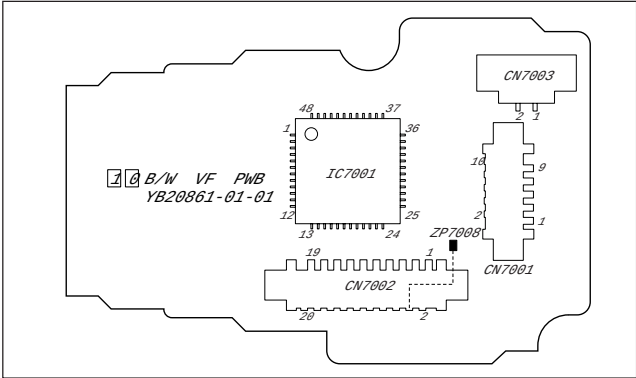


Fig. 3-4-1 E. VF board (A)

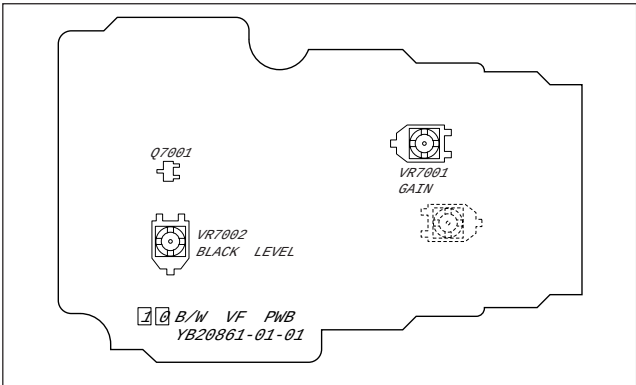


Fig. 3-4-2 E. VF board (B)

3.4.1 Black level

|                   |                                                                                       |
|-------------------|---------------------------------------------------------------------------------------|
| Subject           | <ul style="list-style-type: none"><li>• Camera picture</li><li>• Gray scale</li></ul> |
| Mode              | <ul style="list-style-type: none"><li>• EE</li></ul>                                  |
| Equipment         | <ul style="list-style-type: none"><li>• Oscilloscope</li></ul>                        |
| Measurement point | <ul style="list-style-type: none"><li>• CN7002 pin 4 (VIDLO)</li></ul>                |
| Adjustment part   | <ul style="list-style-type: none"><li>• VR7002 (Black level)</li></ul>                |
| Specification     | <ul style="list-style-type: none"><li>• "A"=2.5 ± 0.05 VDC</li></ul>                  |

- 1) Observe waveform at pin 4 of the CN7002.
- 2) Adjust VR7002 so that DC level of "A" (between the pedestal level and GND, see Fig. 3-4-3) of a waveform becomes 2.5 ± 0.05 V DC.

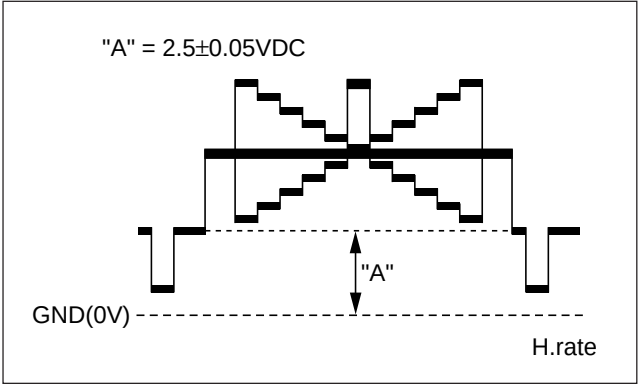


Fig. 3-4-3 Black level

3.4.2 Gain

|                   |                                                                                       |
|-------------------|---------------------------------------------------------------------------------------|
| Subject           | <ul style="list-style-type: none"><li>• Camera picture</li><li>• Gray scale</li></ul> |
| Mode              | <ul style="list-style-type: none"><li>• EE</li></ul>                                  |
| Equipment         | <ul style="list-style-type: none"><li>• Oscilloscope</li></ul>                        |
| Measurement point | <ul style="list-style-type: none"><li>• CN7002 pin 4 (VIDLO)</li></ul>                |
| Adjustment part   | <ul style="list-style-type: none"><li>• VR7001 (Gain)</li></ul>                       |
| Specification     | <ul style="list-style-type: none"><li>• "A"=2.7 ± 0.05 Vp-p</li></ul>                 |

- 1) Observe waveform at pin 4 of the CN7002.
- 2) Adjust VR7001 so that level of "A" (see Fig. 3-4-4) of a waveform becomes 2.7 ± 0.05 Vp-p.

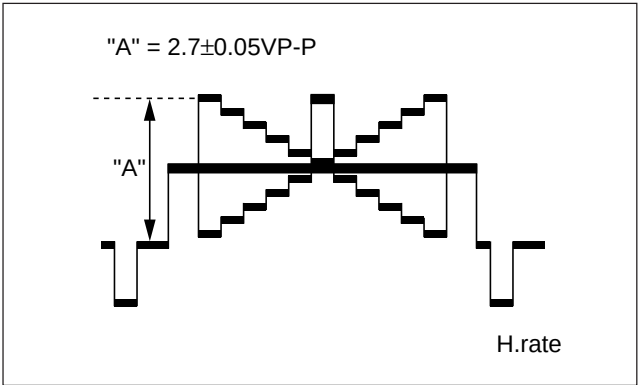


Fig. 3-4-4 Gain

3.5 FUSE LOCATION FOR MAIN

COMPONENT SIDE

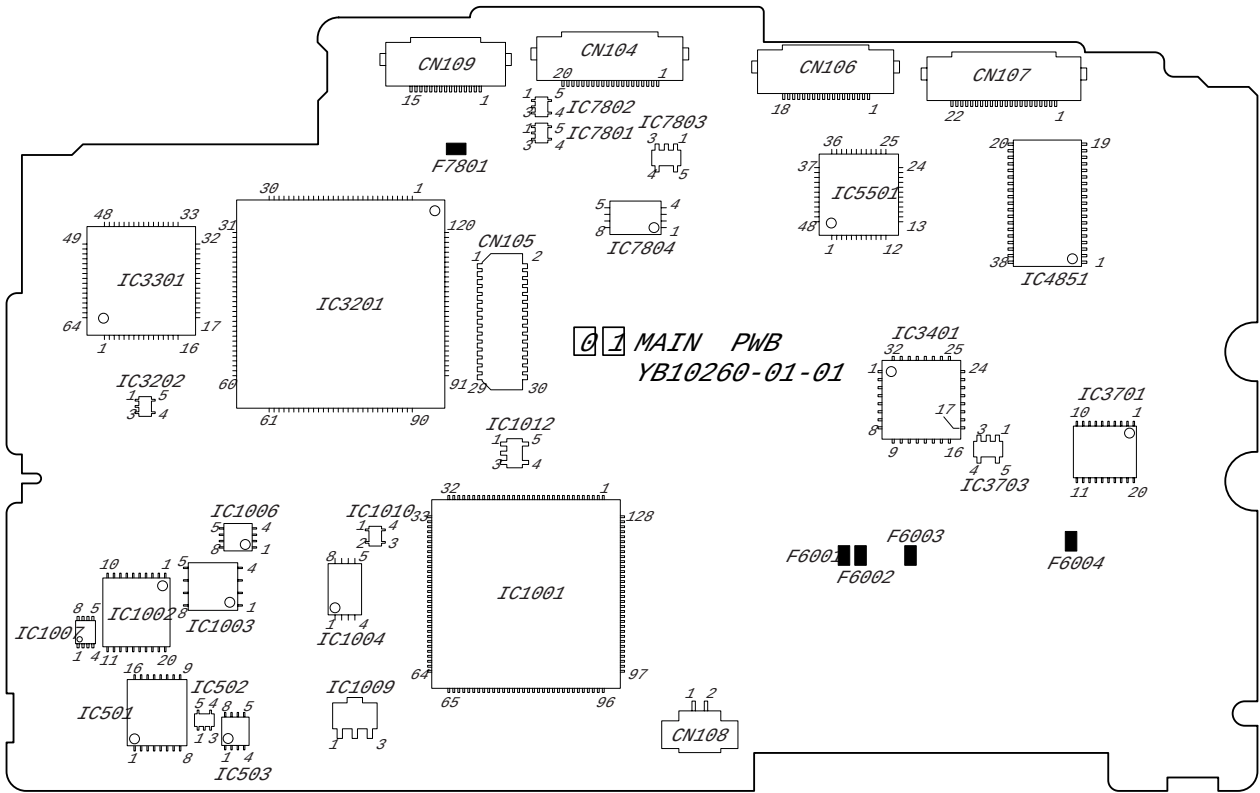


Fig. 3-5-1 FUSE location for MAIN board assembly

## SECTION 4 CHARTS AND DIAGRAMS

### NOTES OF SCHEMATIC DIAGRAM

#### Safety precautions

The Components identified by the symbol  are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

#### 1. Units of components on the schematic diagram

Unless otherwise specified.

- 1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).  
Chip resistors are 1/16 W.  
K: K $\Omega$  (1000 $\Omega$ ), M: M $\Omega$  (1000K $\Omega$ )
- 2) All capacitance values are in  $\mu$ F, (P: PF).
- 3) All inductance values are in  $\mu$ H, (m: mH).
- 4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

#### 2. Indications of control voltage

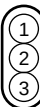
AUX : Active at high.

$\overline{\text{AUX}}$  or AUX(L) : Active at low.

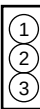
#### 3. Interpreting Connector indications



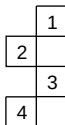
Removable connector



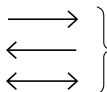
Wire soldered directly on board



Non-removable Board connector



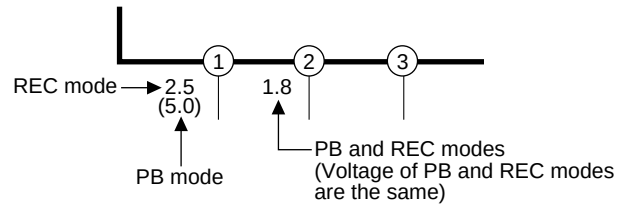
Board to Board



Connected pattern on board  
The arrows indicate signal path

#### 4. Voltage measurement

- 1) Regulator (DC/DC CONV) circuits  
REC : Colour bar signal.  
PB : Alignment tape (Colour bar).  
— : Unmeasurable or unnecessary to measure.
- 4) Indication on schematic diagram  
Voltage Indications for REC and PB mode on the schematic diagram are as shown below.

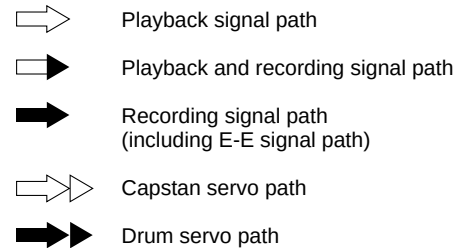


**Note:** If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

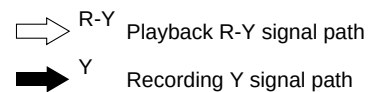
#### 5. Signal path Symbols

The arrows indicate the signal path as follows.

**NOTE :** The arrow is DVC unique object.



(Example)



#### 6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



#### 7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.



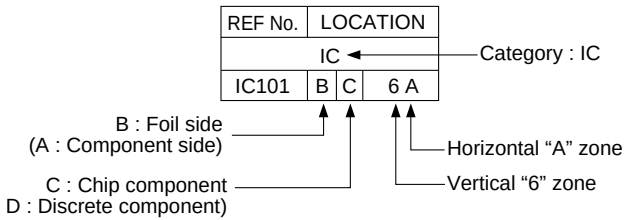
CIRCUIT BOARD NOTES

1. Foil and Component sides

- 1) Foil side (B side) :  
Parts on the foil side seen from foil face (pattern face) are indicated.
- 2) Component side (A side) :  
Parts on the component side seen from component face (parts face) indicated.

2. Parts location guides

Parts location are indicated by guide scale on the circuit board.



**Note:** For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

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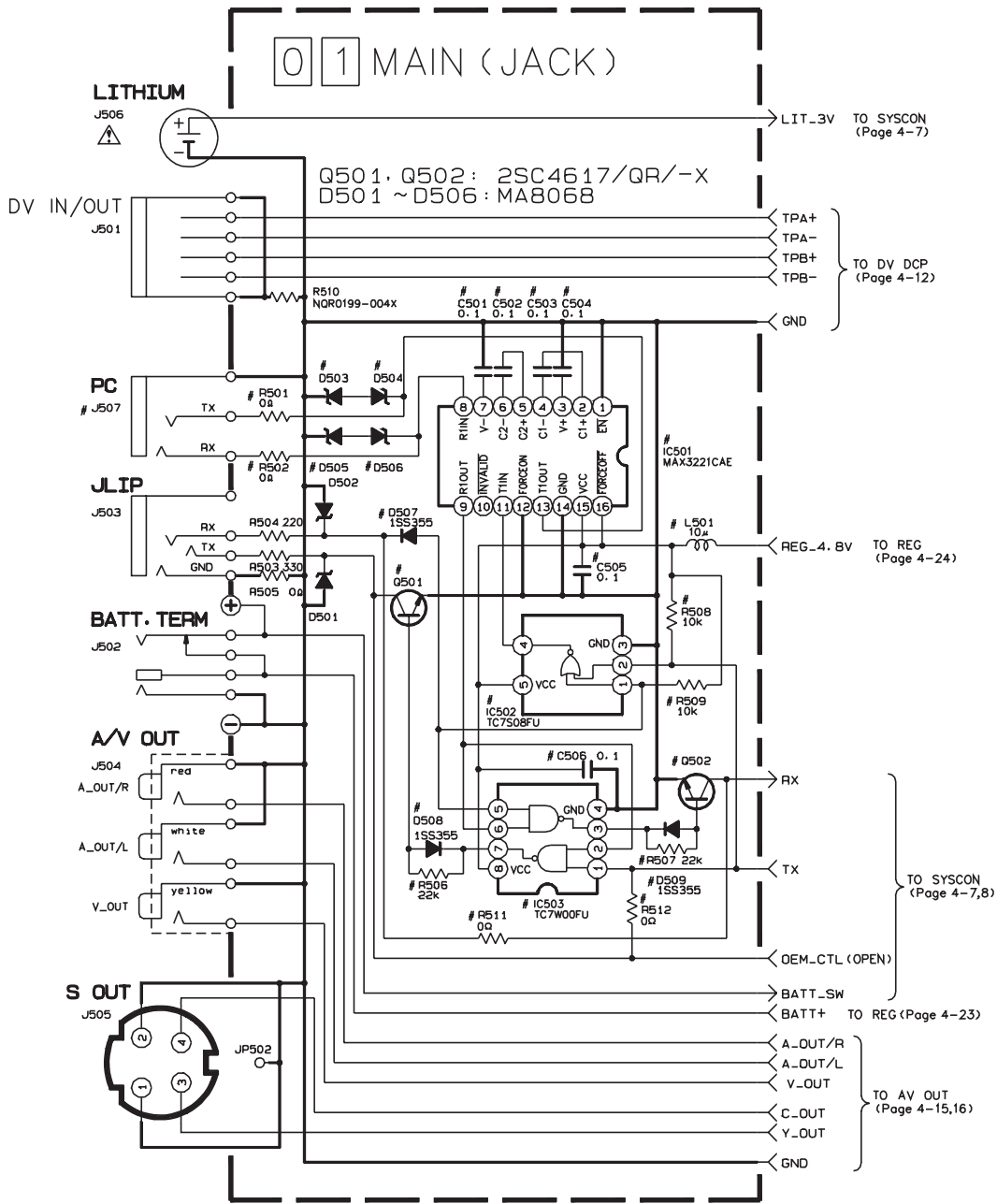
1





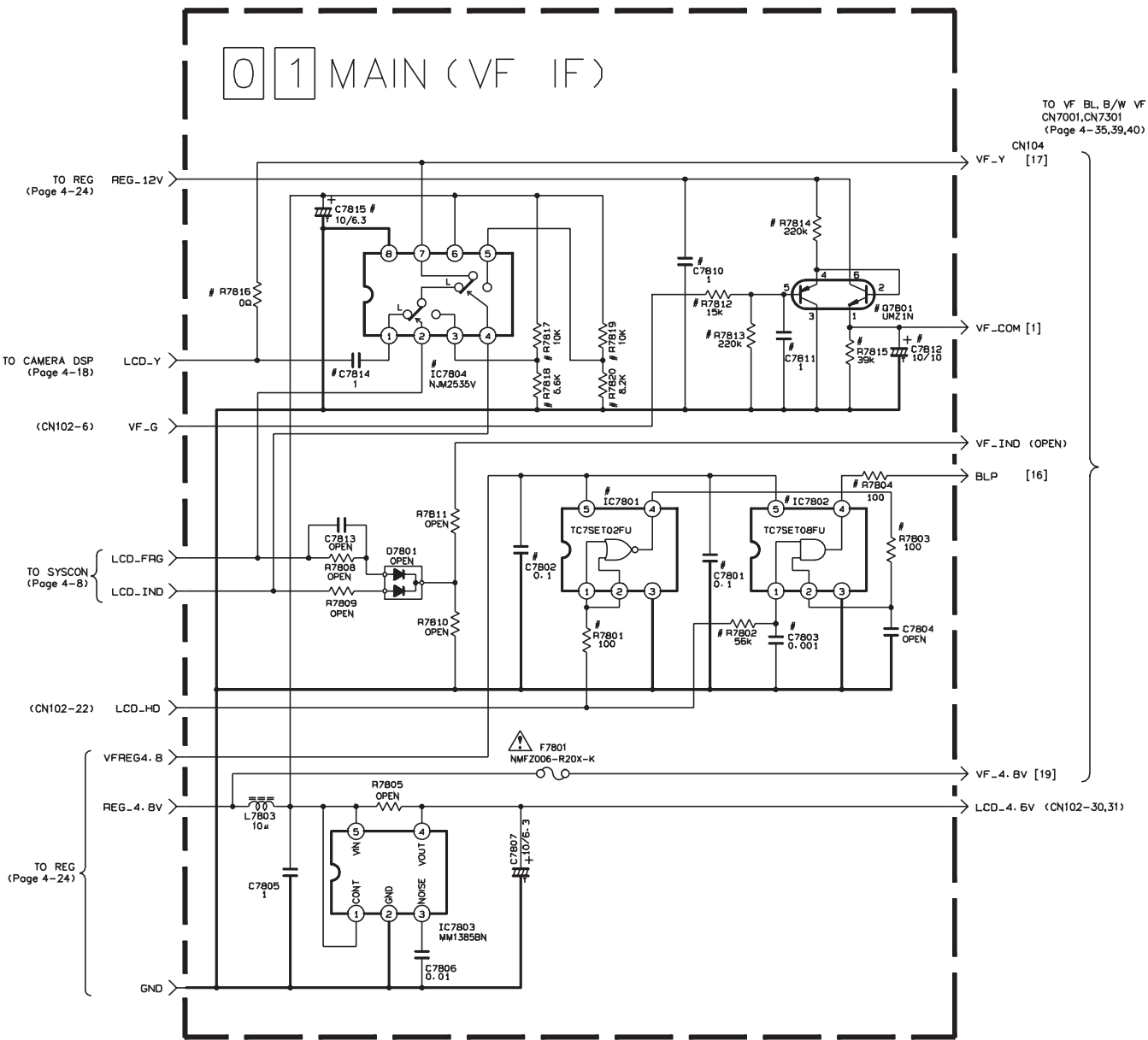
4.2 JACK AND VF IF SCHEMATIC DIAGRAMS

NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



NOTE : COMPARISON CHART OF MODELS & MARKS (#)

| REF. NO   | IC501<br>IC503 | Q501<br>Q502 | D503<br>D509 | R501<br>R502 | R506<br>R509 | R511<br>R512 | C501<br>C506 | L501 | J507 |
|-----------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|------|------|
| GR-DVF11U | OPEN           | OPEN         | OPEN         | OPEN         | OPEN         | USED         | OPEN         | OPEN | OPEN |
| GR-DVF21U | USED           | USED         | USED         | USED         | OPEN         | USED         | USED         | USED | USED |
| GR-DVF31U | USED           | USED         | USED         | USED         | OPEN         | USED         | USED         | USED | USED |



NOTE : COMPARISON CHART OF MODELS & MARKS (#)

| REF. NO   | IC7801<br>IC7802 | IC7804 | Q7801 | R7801<br>R7804 | R7812<br>R7816 | R7817<br>R7820 | C7801<br>C7803 | C7810<br>C7812 | C7814<br>C7815 | CN104 |
|-----------|------------------|--------|-------|----------------|----------------|----------------|----------------|----------------|----------------|-------|
| GR-DVF11U | OPEN             | USED   | OPEN  | OPEN           | OPEN           | USED           | OPEN           | OPEN           | USED           | 10pin |
| GR-DVF21U | OPEN             | USED   | OPEN  | OPEN           | OPEN           | OPEN           | OPEN           | OPEN           | USED           | 10pin |
| GR-DVF31U | USED             | OPEN   | USED  | USED           | USED           | OPEN           | USED           | USED           | OPEN           | 20pin |

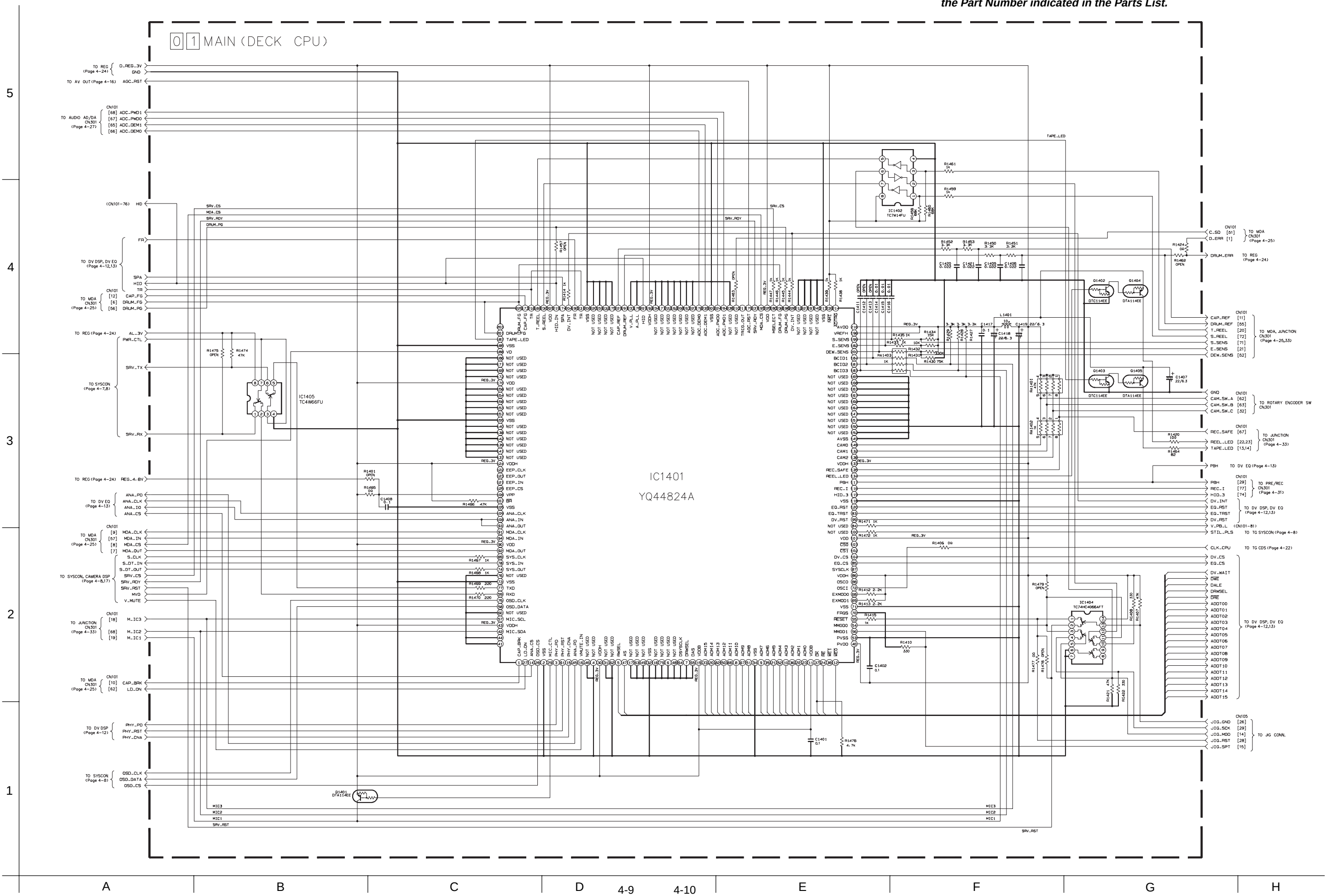
1

```
01 MAIN (SYSCON)
```



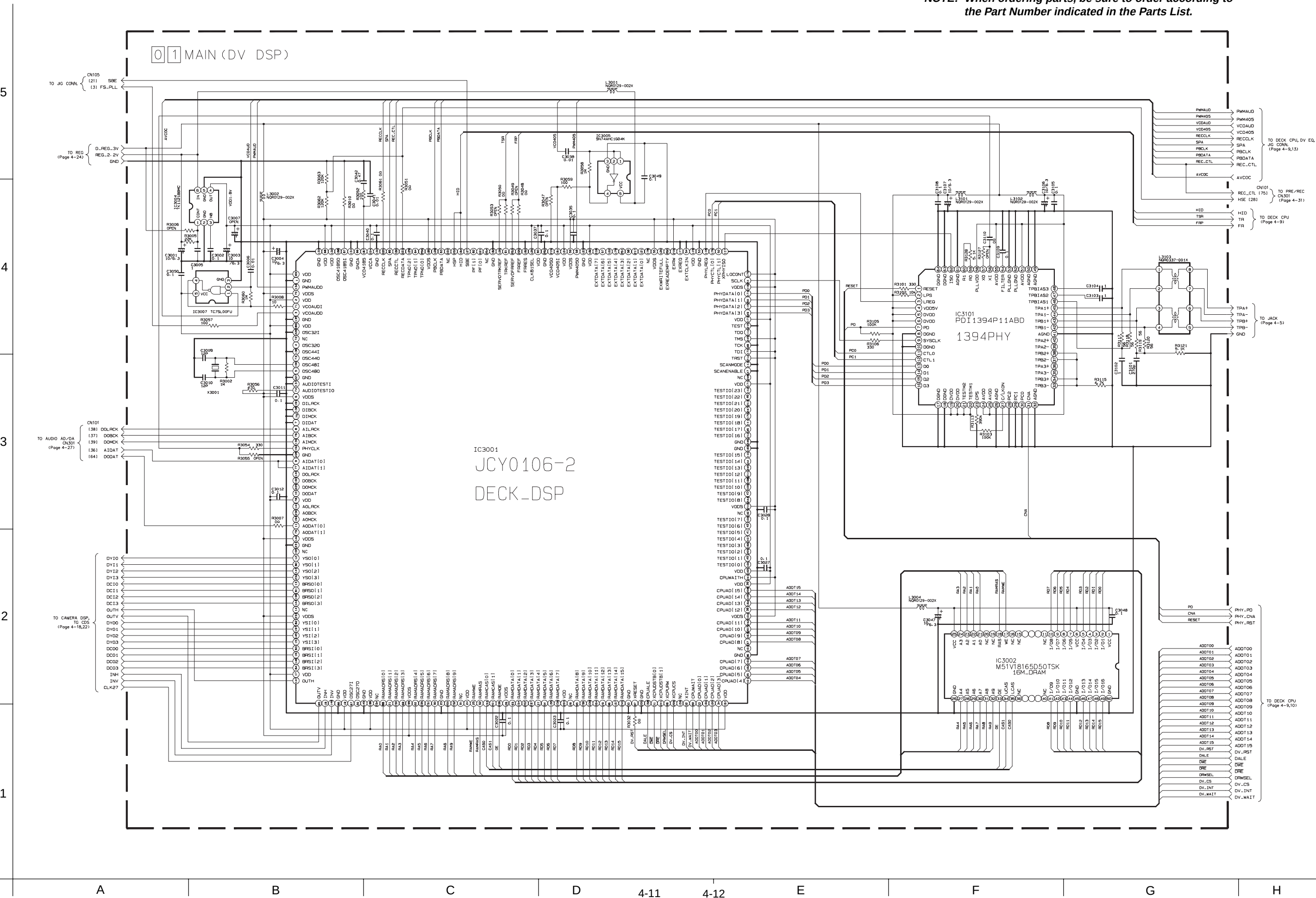
#### 4.4 DECK CPU SCHEMATIC DIAGRAM

**NOTE:** When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



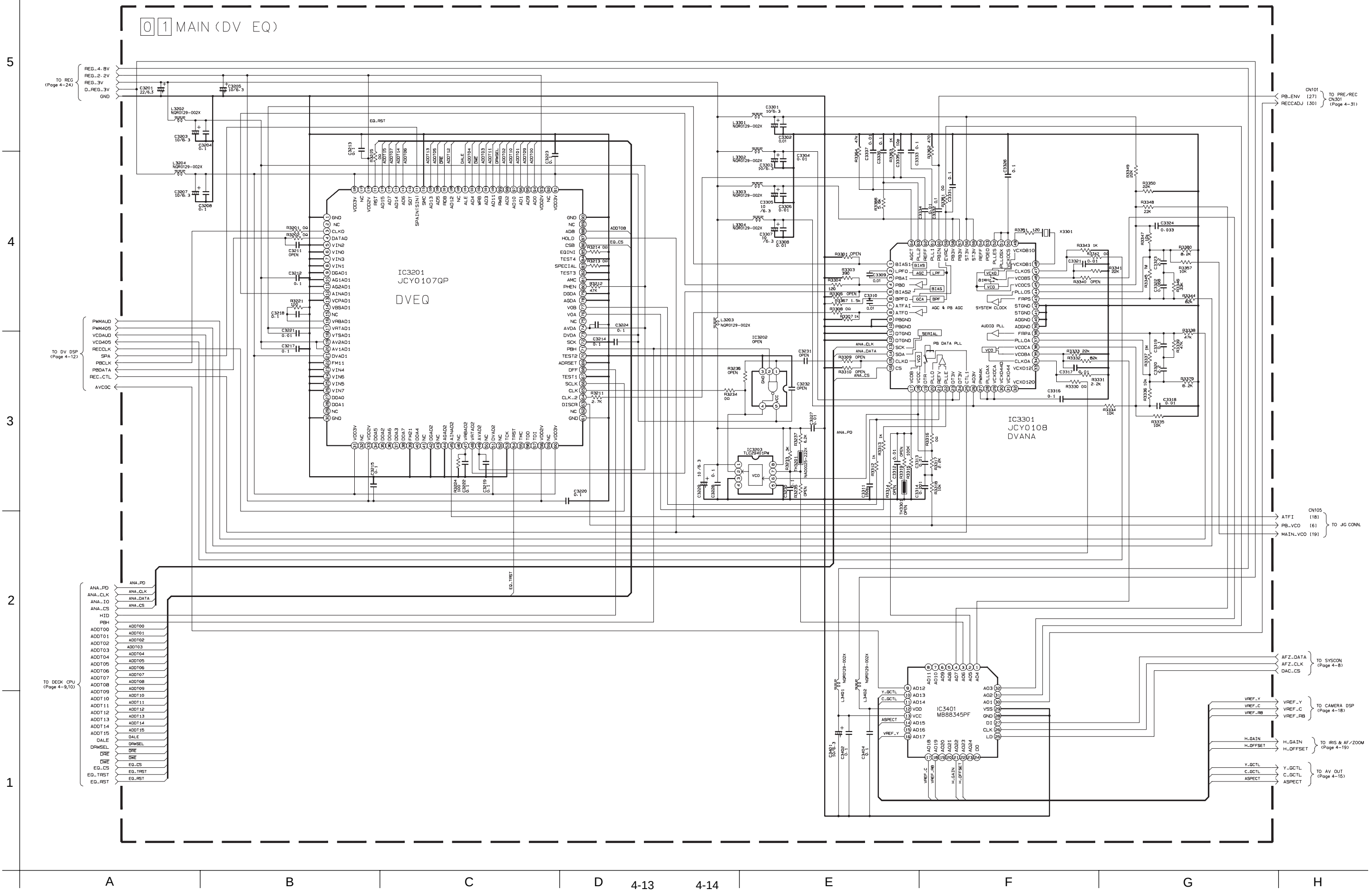
4.5 DV DSP SCHEMATIC DIAGRAM

NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



#### 4.6 DV EQ SCHEMATIC DIAGRAM

**NOTE:** When ordering parts, be sure to order according to the Part Number indicated in the Parts List.





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1

A B C D E F G H

01 MAIN (AV OUT)

TO JACK  
(Page 4-5)

TO MAIN AUDIO  
CN301  
(Page 4-30)

TO DV EQ  
(Page 4-14)

TO SYSCON  
(Page 4-8)

TO REG  
(Page 4-24)

TO CAMERA DSP  
(Page 4-18)

IC3701  
NUM2538V

IC3703  
S-81235SG-QI-X

Q3701  
DTC144EE

D2151 OPEN

D2152 OPEN

D3701 MAB06B

D3702 MAB06B

D3703 MAB06B

C2151 0.0047

C2152 0.0047

C2153 100p

C2154 100p

L2151 0Ω

L2152 0Ω

R2151 100

R2152 100

C3705 0.01

C3706 10/6.3

C3707 0.01

C3708 0.01

C3709 0.1

C3710 0.1

C3711 0.01

C3712 0.01

C3713 10/6.3

C3720 330/4

C3721 OPEN

C3722 OPEN

C3724 1

C3725 1

C3702 22/6.3

C3704 10/6.3

R3704 220K

R3703 10K

R3712 0Ω

R3705 120

R3731 OPEN

R3733 68

R3732 68

R3734 68

R3708 120

R3707 10K

R3735 OPEN

R3706 2.2M

L3701 10μ

L3702 10/6.3

L3703 22/6.3

L3704 10/6.3

L3705 10/6.3

L3706 10/6.3

L3707 10/6.3

L3708 10/6.3

L3709 10/6.3

L3710 10/6.3

L3711 10/6.3

L3712 10/6.3

L3713 10/6.3

L3714 10/6.3

L3715 10/6.3

L3716 10/6.3

L3717 10/6.3

L3718 10/6.3

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L3799 10/6.3

L3800 10/6.3

L3801 10/6.3

L3802 10/6.3

L3803 10/6.3

L3804 10/6.3

L3805 10/6.3

L3806 10/6.3

L3807 10/6.3

L3808 10/6.3

L3809 10/6.3

L3810 10/6.3

L3811 10/6.3

L3812 10/6.3

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L3877 10/6.3

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L3895 10/6.3

L3896 10/6.3

L3897 10/6.3

L3898 10/6.3

L3899 10/6.3

L3900 10/6.3

L3901 10/6.3

L3902 10/6.3

L3903 10/6.3

L3904 10/6.3

L3905 10/6.3

L3906 10/6.3

L3907 10/6.3

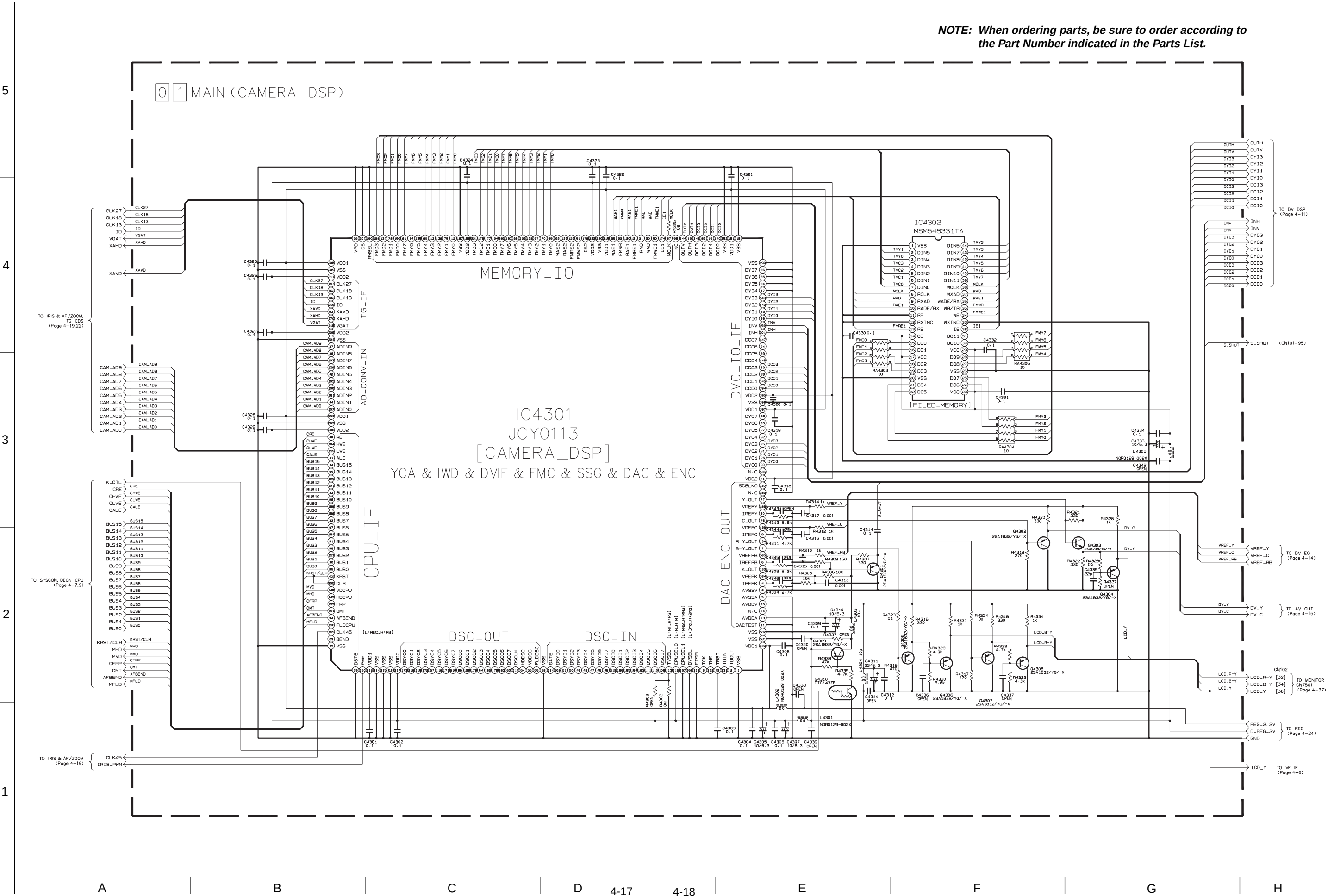
L3908 10/6.3

L3909 10/6.3

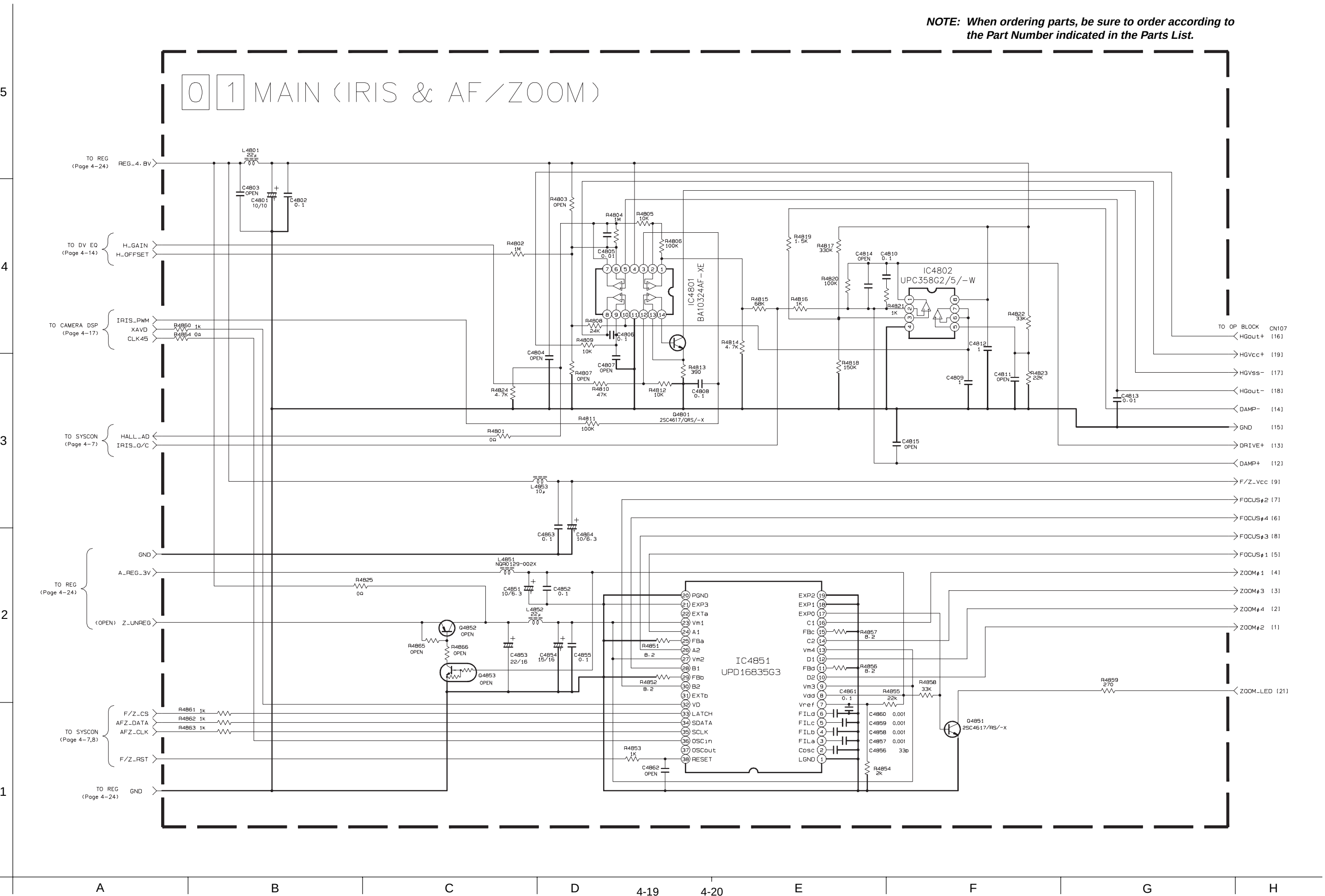


4.8 CAMERA DSP SCHEMATIC DIAGRAM

NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.

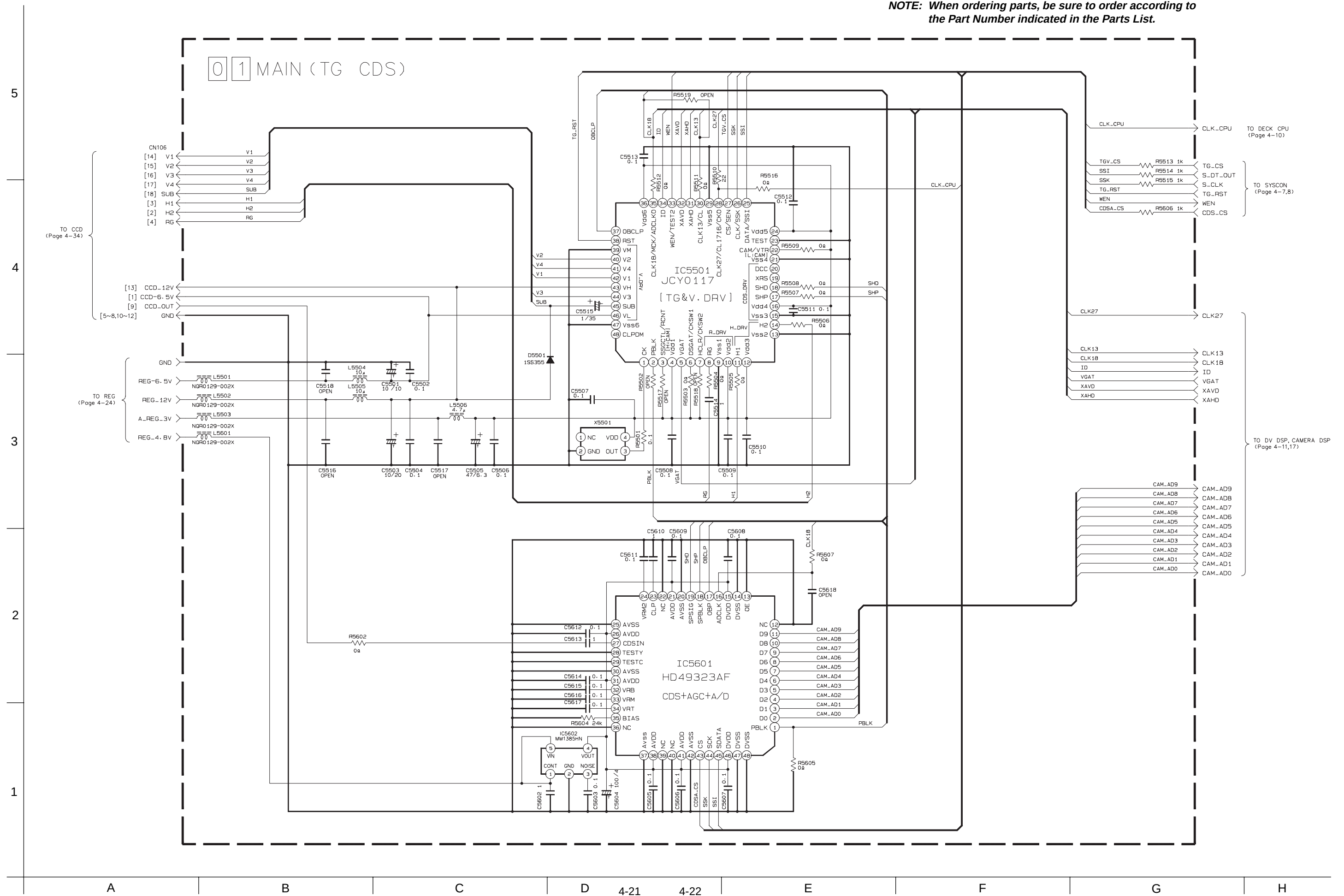


4.9 IRIS & AF/ZOOM SCHEMATIC DIAGRAM



#### 4.10 TG CDS SCHEMATIC DIAGRAM

**NOTE:** When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



## 5

**NOTE:** When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



3

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1

NOTE : COMPARISON CHART OF MODELS & MARKS (#)

| REF. NO<br>MODELS | Q6156 | Q6201<br>Q6203 | R6167 | R6201<br>R6203 | R6205<br>R6206 | C6161 | C6201 | CN108 |
|-------------------|-------|----------------|-------|----------------|----------------|-------|-------|-------|
| GR-DVF11U         | USED  | OPEN           | USED  | OPEN           | OPEN           | USED  | OPEN  | OPEN  |
| GR-DVF21U         | USED  | USED           | USED  | USED           | USED           | USED  | USED  | USED  |
| GR-DVF31U         | OPEN  | USED           | OPEN  | USED           | OPEN           | OPEN  | USED  | USED  |

B

D

4-23

4-24

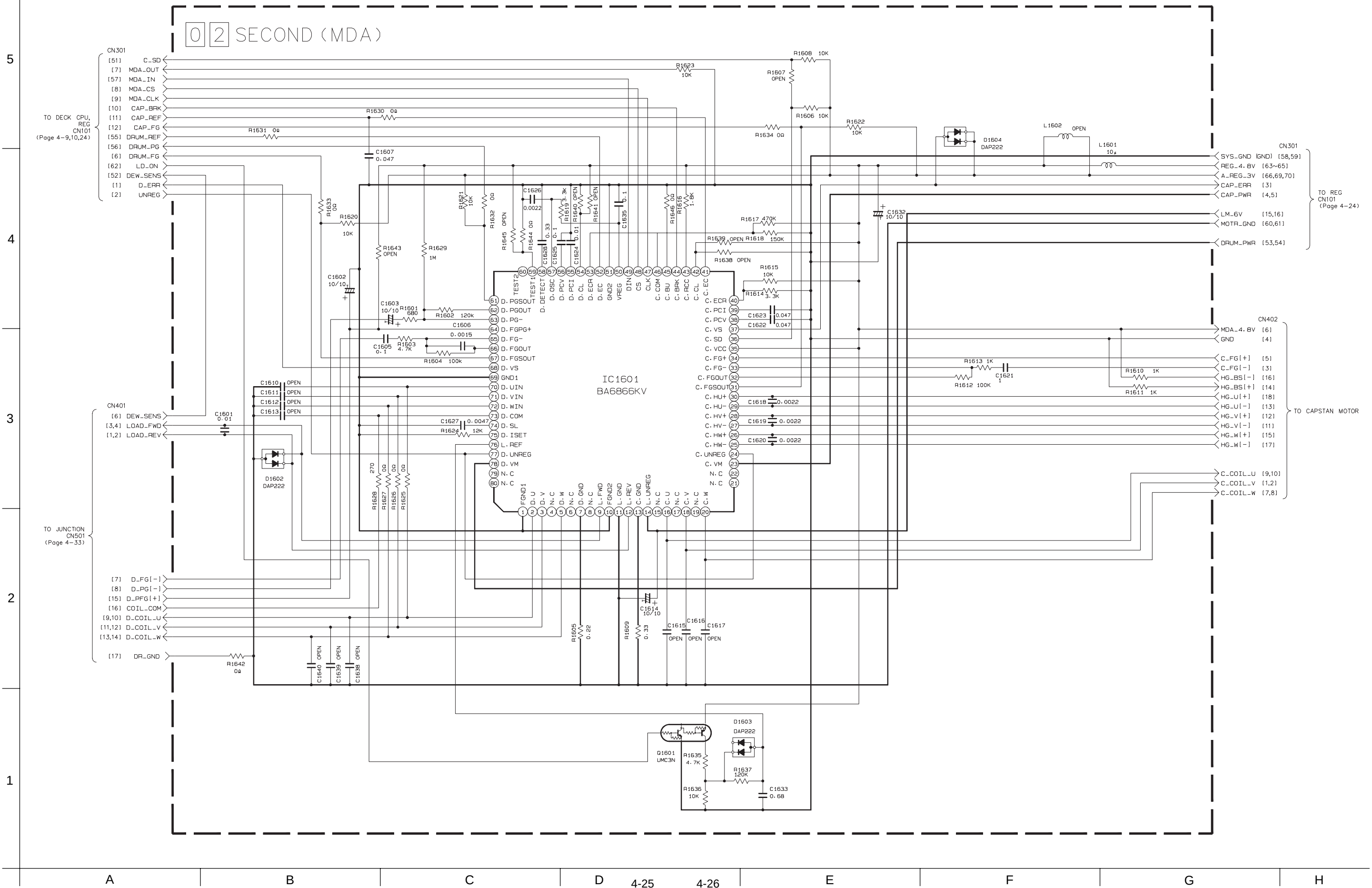
|  |  |
|--|--|
|  |  |
|--|--|

C

H

#### 4.12 MDA SCHEMATIC DIAGRAM

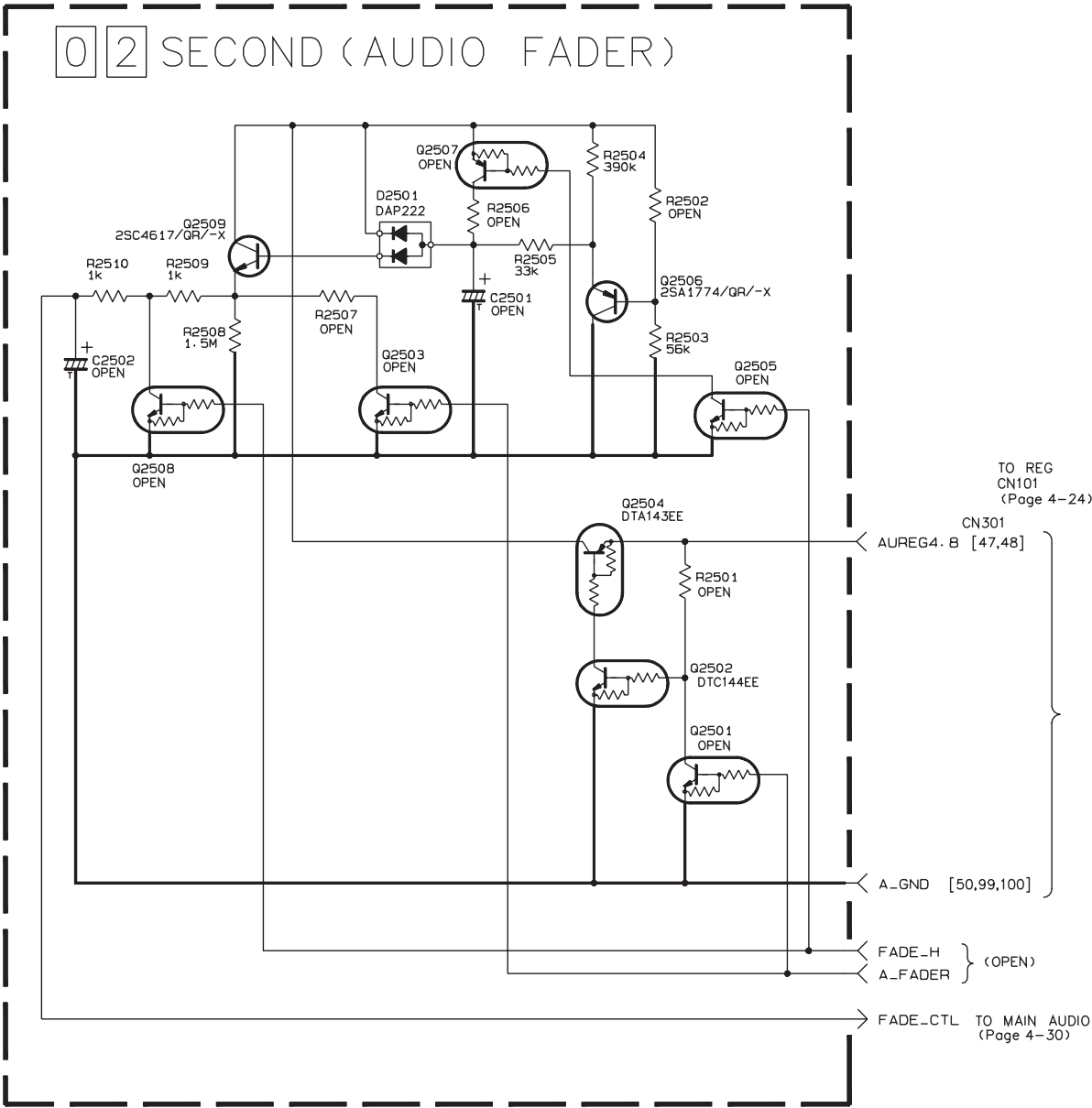
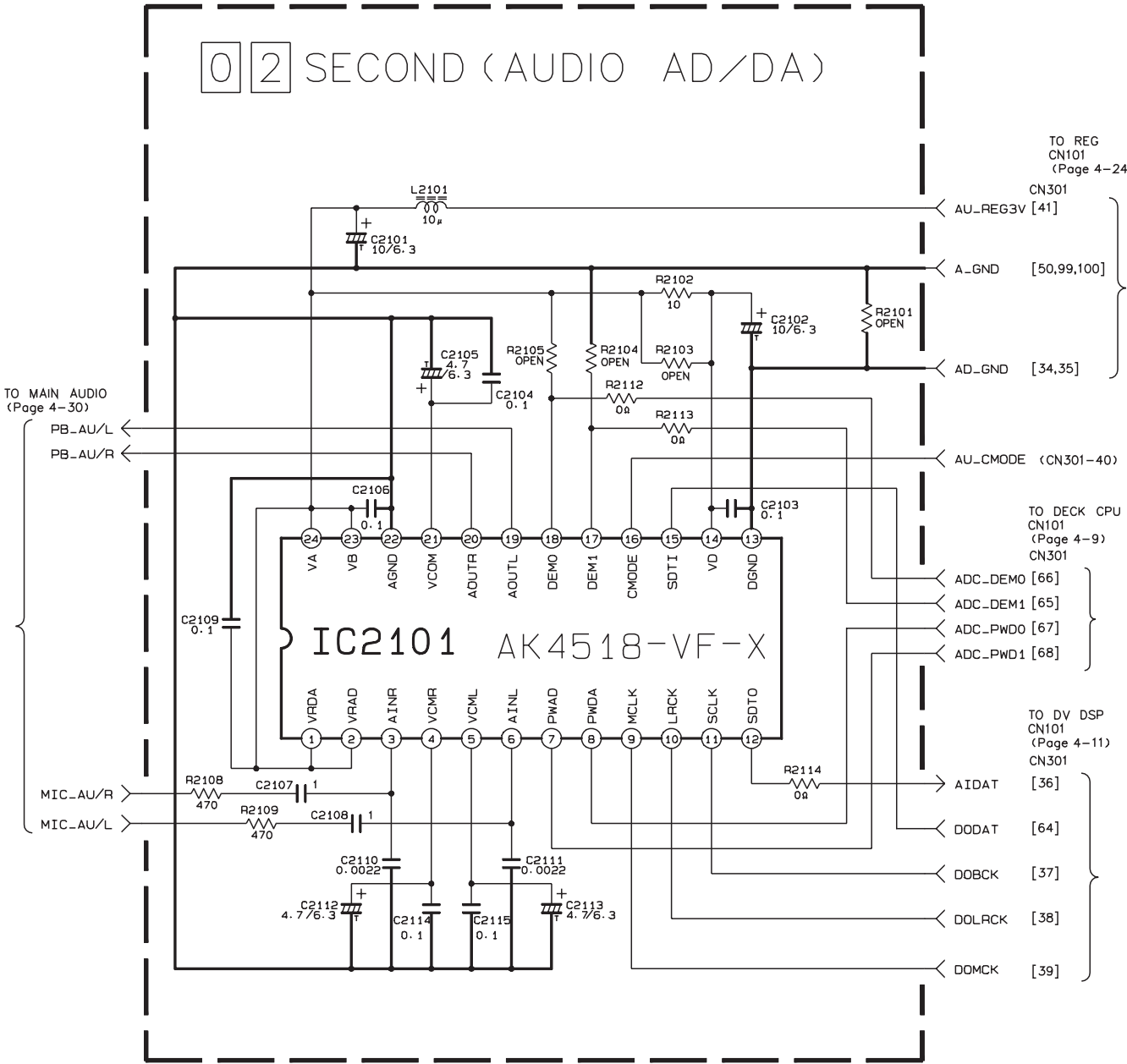
**NOTE:** When ordering parts, be sure to order according to the Part Number indicated in the Parts List.





4.13 AUDIO AD/DA AND AUDIO FADER SCHEMATIC DIAGRAMS

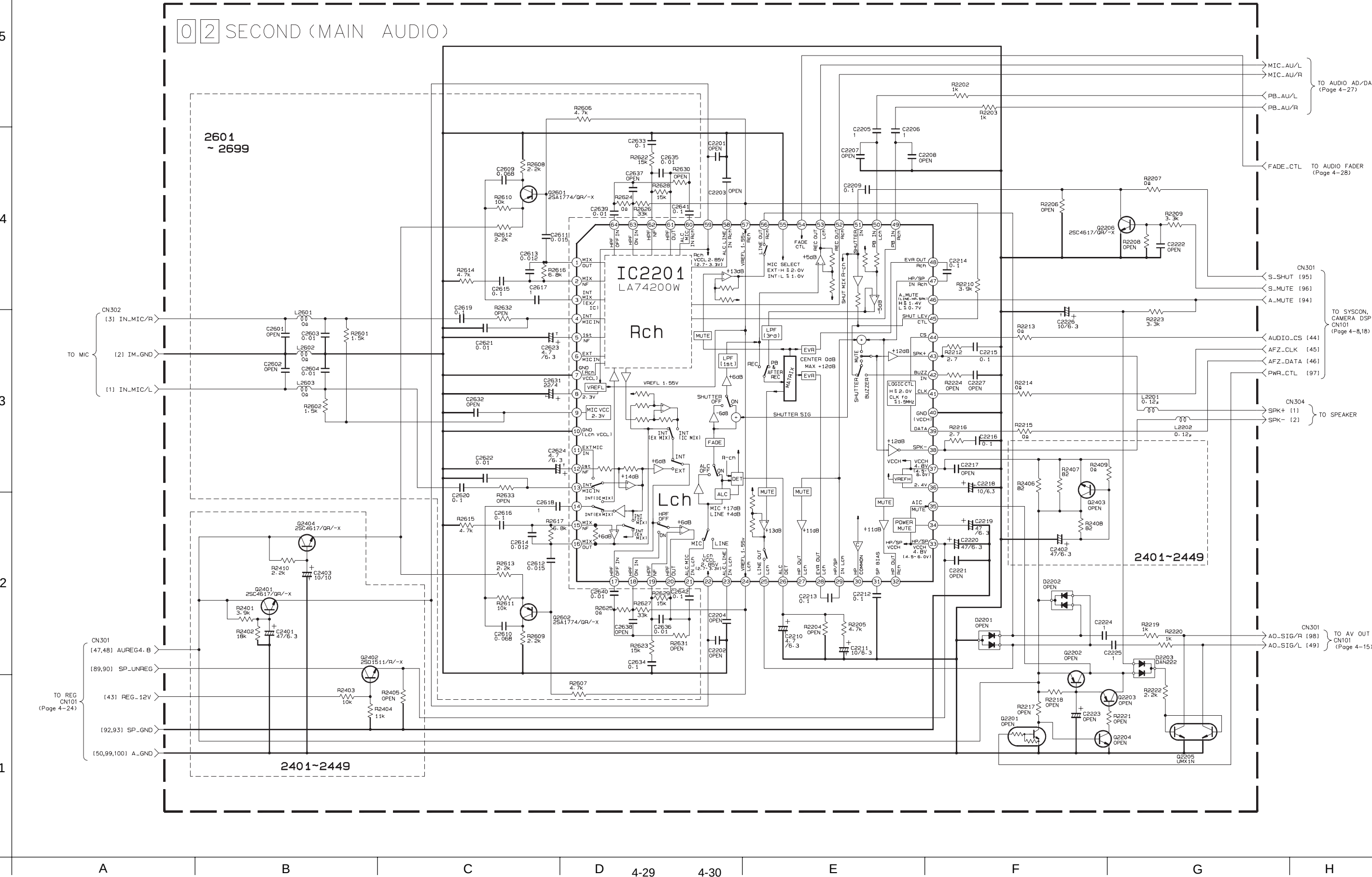
NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.





4.14 MAIN AUDIO SCHEMATIC DIAGRAM

NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



5

4

3

2

1

A B C D E F G H

02 SECOND (PRE/REC)

TO DECK CPU, DV DSP  
CN101  
(Page 4-9,10,12)

TO JIG CONN.  
CN101

TO DV EQ  
CN101  
(Page 4-14)

TO REG  
CN101  
(Page 4-24)

TO HEAD  
CN404  
2F (6)  
2S (7)  
1S (3)  
1F (2)  
P/R\_GND (1,4,5,8)

NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.

IC3501  
AN3731FHQ

LOGIC

HA2

RA2

RA1

HA1

HA3

RA3

MONITOR

HSW

VREF

GCA

ENV DET

3rd AMP

LPF

AGC DET

AGC AMP

Q3505  
2SA1577/QR/-X

Q3506  
DTC144EE

Q3504  
2SC4226/4/-X

Q3503  
2SD1979/S/-X

Q3502  
2SD1979/S/-X

Q3501  
2SC4226/4/-X

Q3500  
2SC4226/4/-X

Q3508  
10/6.3

Q3509  
0.01

Q3510  
0.01

Q3511  
0.01

Q3512  
0.01

Q3513  
0.01

Q3514  
0.01

Q3515  
0.01

Q3516  
10/6.3

Q3517  
0.0015

Q3518  
10/6.3

Q3519  
33p

Q3520  
0.01

Q3521  
22p

Q3522  
OPEN

Q3523  
10/6.3

Q3524  
10/6.3

Q3525  
22p

Q3526  
0.01

Q3527  
0.01

Q3528  
33p

Q3529  
10/6.3

Q3530  
0.0015

Q3531  
0.01

Q3532  
22/6.3

Q3533  
0.01

Q3534  
22/6.3

Q3535  
22/6.3

Q3536  
22/6.3

Q3537  
22/6.3

Q3538  
22/6.3

Q3539  
22/6.3

Q3540  
22/6.3

Q3541  
22/6.3

Q3542  
22/6.3

Q3543  
22/6.3

Q3544  
22/6.3

Q3545  
22/6.3

Q3546  
22/6.3

Q3547  
22/6.3

Q3548  
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Q3549  
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Q3550  
22/6.3

Q3551  
22/6.3

Q3552  
22/6.3

Q3553  
22/6.3

Q3554  
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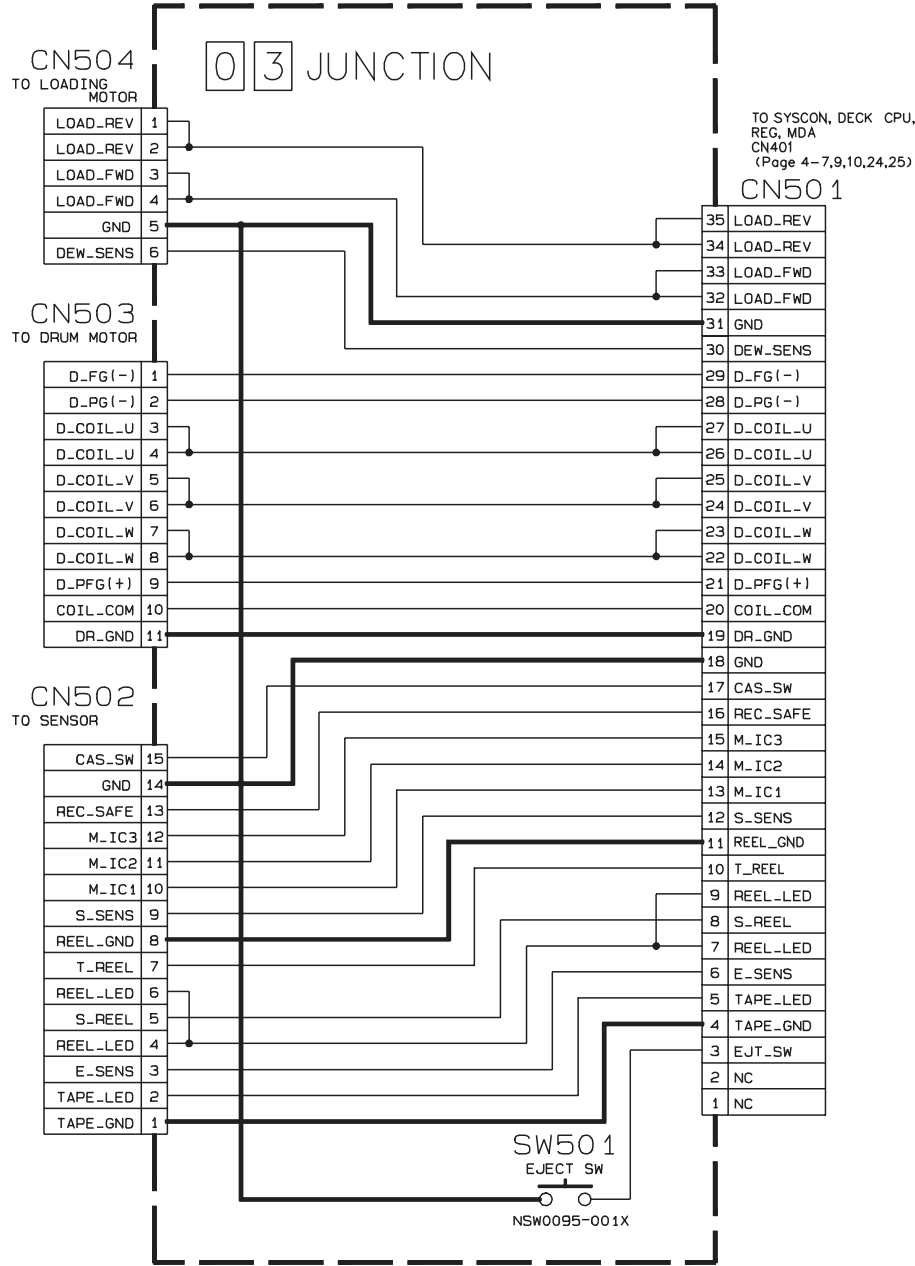
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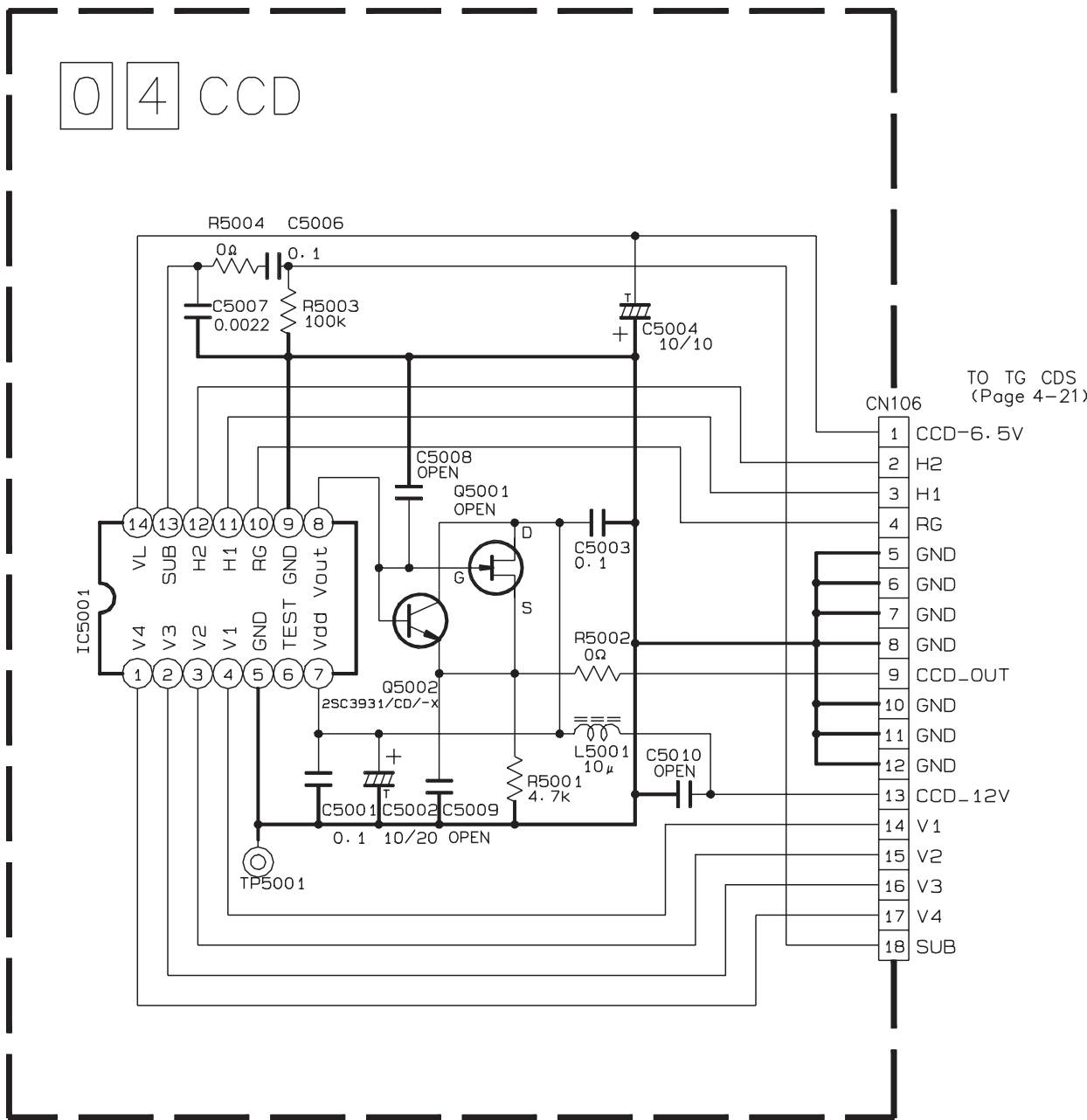
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4.16 JUNCTION AND CCD SCHEMATIC DIAGRAMS

NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.



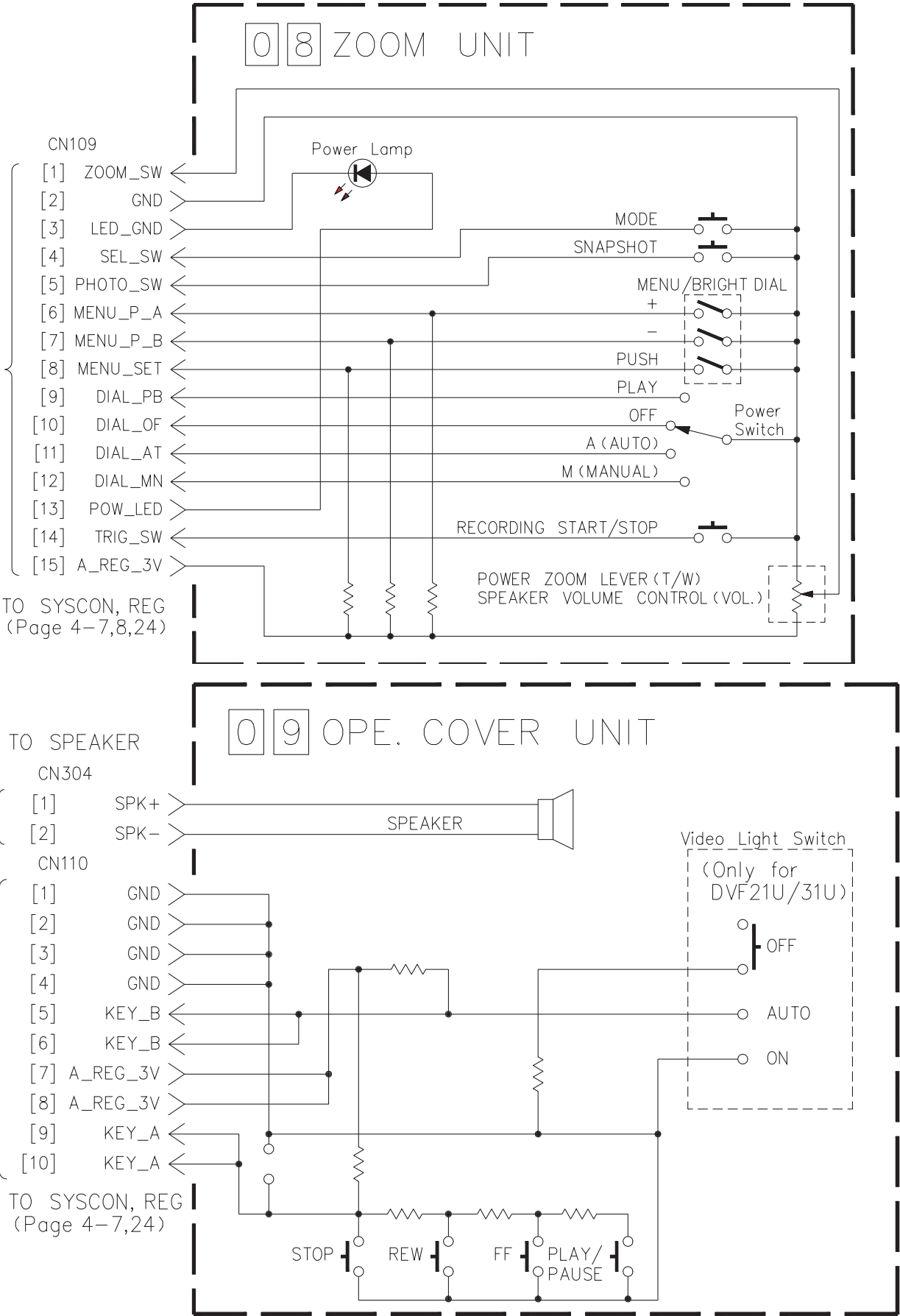
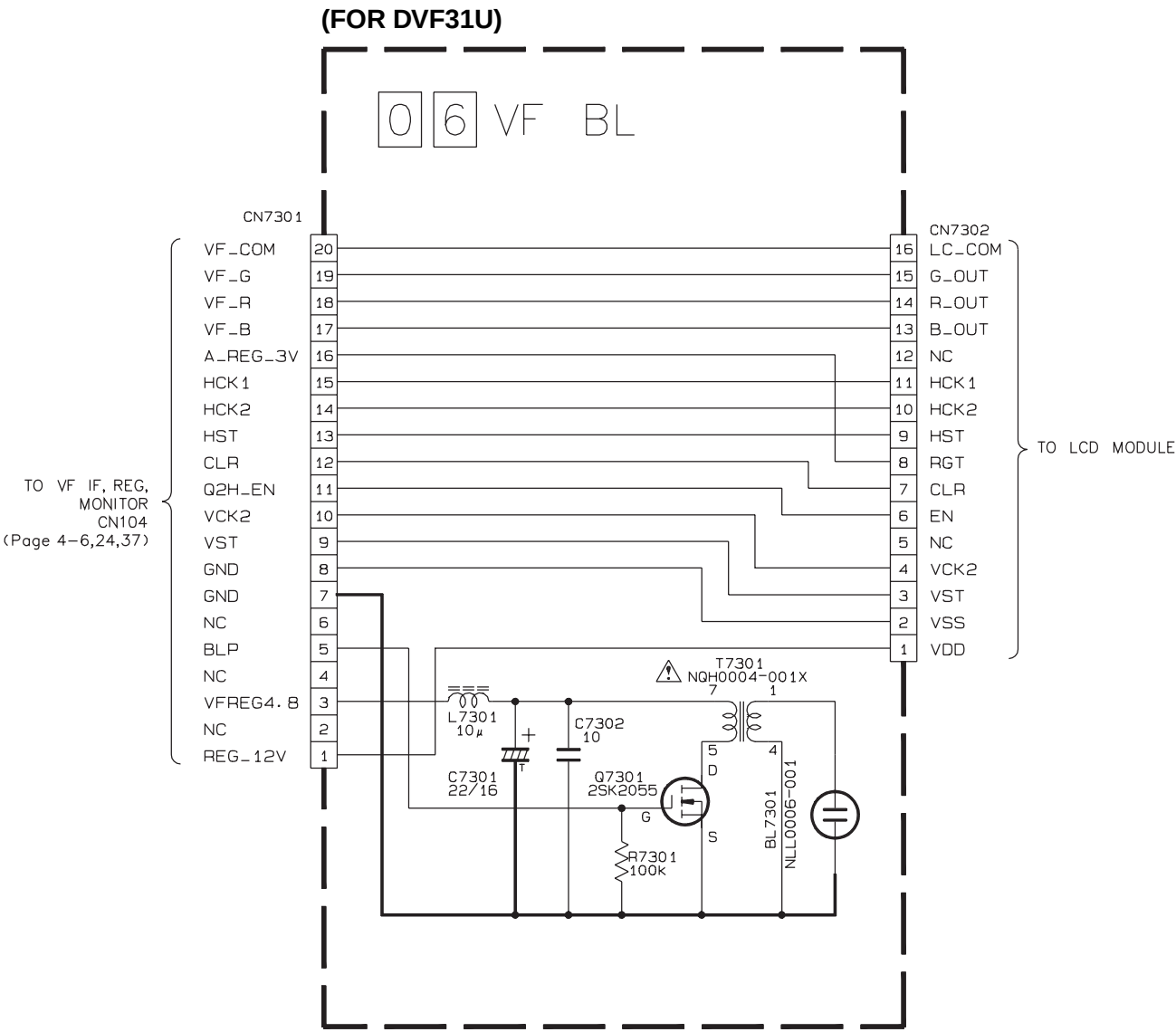
Note: IC5001 is incorporated in the CCD base assembly.  
When IC5001 needs replacement, replace the CCD base assembly in whole because it cannot be replaced alone.



4.17 VF BL, ZOOM UNIT AND OPE. COVER UNIT SCHEMATIC DIAGRAMS

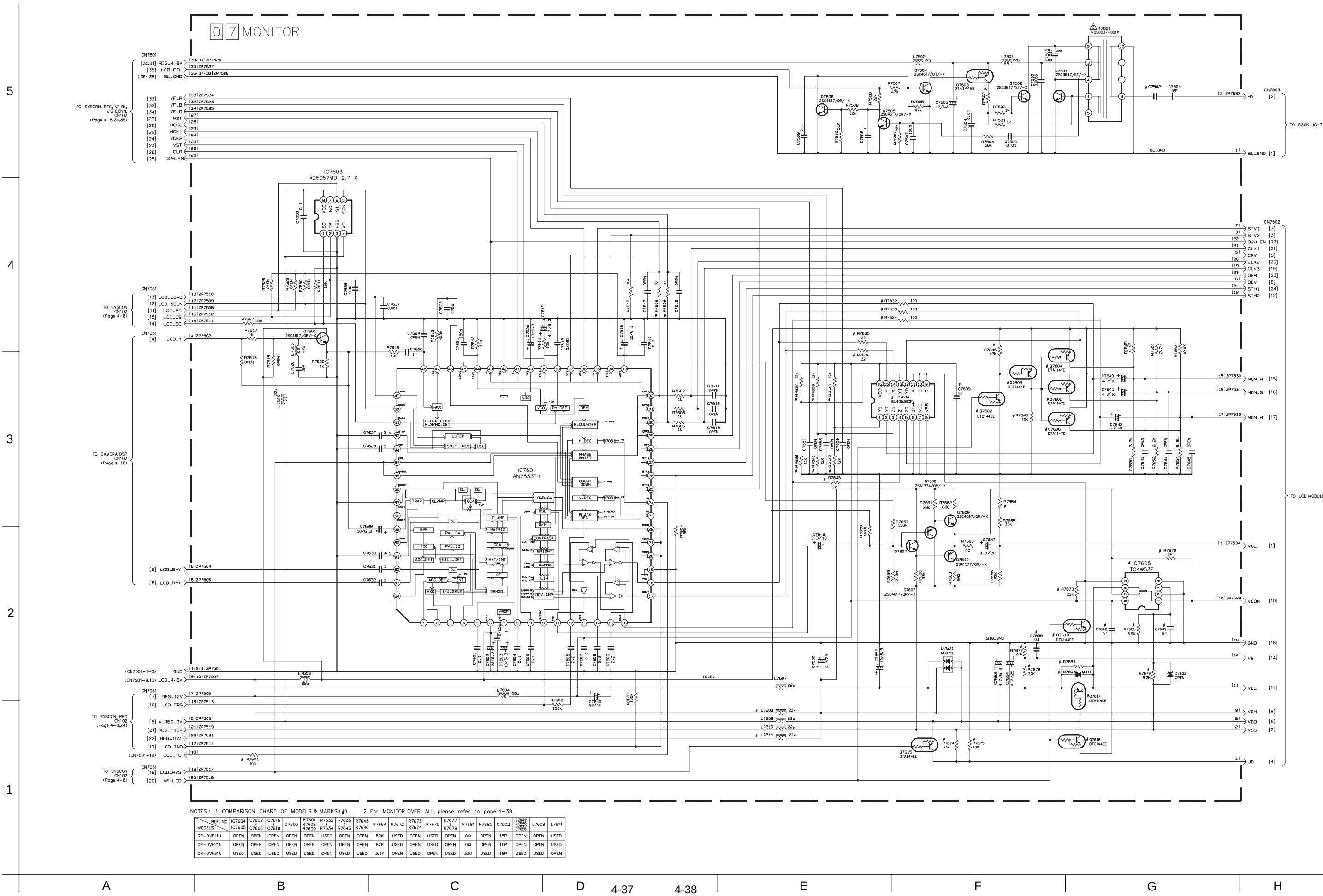
NOTE: The schematic diagrams are only for reference.  
Avoid replacing individual parts.  
Replace the entire unit only.

NOTE: When ordering parts, be sure to order according to  
the Part Number indicated in the Parts List.



4.18 MONITOR SCHEMATIC DIAGRAM

NOTE: When ordering parts, be sure to order according to the Part Number indicated in the Parts List.





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**FOIL SIDE (B)**



# COMPONENT PARTS LOCATION GUIDE (MAIN)

| REF.No.   | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    |
|-----------|----------|---|----|---------|----------|---|----|---------|----------|---|----|---------|----------|---|----|---------|----------|---|----|---------|----------|---|----|---------|----------|---|----|
| CAPACITOR |          |   |    | C3011   | B        | C | 5D | C3332   | B        | C | 6C | C4804   | B        | C | 2D | C6016   | B        | C | 4A | DIODE   |          |   |    | IC6001  | B        | C | 3A |
| C501      | A        | C | 6A | C3012   | B        | C | 4D | C3333   | B        | C | 6C | C4805   | B        | C | 2D | C6017   | B        | C | 4A | D501    | A        | C | 6B | IC6301  | B        | C | 4B |
| C502      | A        | C | 6A | C3022   | B        | C | 4C | C3334   | B        | C | 6C | C4806   | B        | C | 2D | C6018   | B        | C | 4A | D502    | A        | C | 6B | IC7801  | A        | C | 4D |
| C503      | A        | C | 6A | C3023   | B        | C | 5C | C3335   | B        | C | 6C | C4807   | B        | C | 2D | C6019   | B        | C | 3A | D503    | A        | C | 6A | IC7802  | A        | C | 4D |
| C504      | A        | C | 6A | C3027   | B        | C | 5D | C3336   | B        | C | 6C | C4808   | B        | C | 1D | C6020   | B        | C | 3A | D504    | A        | C | 6A | IC7803  | A        | C | 3D |
| C505      | A        | C | 6A | C3028   | B        | C | 4D | C3337   | B        | C | 6C | C4809   | B        | C | 2D | C6021   | B        | C | 3A | D505    | A        | C | 6A | IC7804  | A        | C | 4C |
| C506      | A        | C | 6A | C3035   | B        | C | 4C | C3401   | A        | C | 2B | C4810   | B        | C | 2D | C6101   | B        | C | 3A | D506    | A        | C | 6A | COIL    |          |   |    |
| C1001     | A        | C | 5B | C3037   | B        | C | 5D | C3402   | A        | C | 2B | C4811   | B        | C | 2D | C6102   | A        | C | 2A | D507    | A        | C | 6B | L501    | A        | C | 6A |
| C1002     | A        | C | 5B | C3038   | B        | C | 6C | C3404   | A        | C | 2B | C4812   | B        | C | 2D | C6103   | B        | C | 3A | D508    | A        | C | 6A |         | L1001    | A | C  |
| C1003     | A        | C | 6A | C3040   | B        | C | 4D | C3702   | A        | C | 2B | C4813   | B        | C | 2D | C6104   | B        | C | 4A | D509    | A        | C | 6A | L1002   | A        | C | 5A |
| C1004     | A        | C | 4A | C3041   | B        | C | 5C | C3703   | A        | C | 1B | C4814   | B        | C | 2C | C6111   | B        | C | 2A | D1001   | A        | C | 5B | L1003   | B        | C | 1C |
| C1005     | A        | C | 6B | C3042   | B        | C | 5C | C3704   | A        | C | 2B | C4815   | B        | C | 2C | C6112   | A        | C | 2A | D1002   | A        | C | 5A | L1005   | A        | C | 6B |
| C1006     | A        | C | 6B | C3047   | B        | C | 4B | C3705   | A        | C | 1B | C4851   | A        | C | 1C | C6113   | A        | C | 1B | D1003   | A        | C | 4A | L1005   | A        | C | 6B |
| C1007     | B        | C | 1D | C3048   | B        | C | 4B | C3706   | A        | C | 1B | C4852   | A        | C | 1C | C6114   | B        | C | 4A | D1004   | A        | C | 3B | L1401   | A        | C | 5A |
| C1008     | A        | C | 4A | C3049   | B        | C | 6C | C3707   | A        | C | 1B | C4853   | A        | C | 2C | C6115   | A        | C | 2B | D2151   | B        | C | 1B | L2151   | B        | C | 1B |
| C1009     | A        | C | 5A | C3050   | B        | C | 6D | C3708   | A        | C | 1B | C4854   | B        | C | 2C | C6116   | A        | C | 2A | D2152   | B        | C | 1B | L2152   | B        | C | 1B |
| C1010     | A        | C | 5A | C3101   | B        | C | 6A | C3709   | A        | C | 1B | C4855   | A        | C | 2D | C6117   | A        | C | 2B | D3701   | B        | C | 1A | L3001   | B        | C | 6C |
| C1011     | A        | C | 5A | C3102   | B        | C | 6B | C3710   | A        | C | 2B | C4856   | A        | C | 1C | C6121   | B        | C | 2A | D3702   | B        | C | 1C | L3002   | B        | C | 4C |
| C1012     | A        | C | 6A | C3103   | B        | C | 6B | C3711   | A        | C | 2B | C4857   | A        | C | 1C | C6122   | A        | C | 2A | D3703   | B        | C | 1A | L3004   | B        | C | 4B |
| C1013     | A        | C | 5B | C3104   | B        | C | 6B | C3712   | A        | C | 1B | C4858   | A        | C | 1C | C6123   | B        | C | 4A | D5501   | A        | C | 3D | L3101   | B        | C | 6A |
| C1014     | A        | C | 3B | C3105   | B        | C | 6A | C3713   | A        | C | 1C | C4859   | A        | C | 1C | C6131   | B        | C | 3A | D6101   | B        | C | 3A | L3102   | B        | C | 6A |
| C1015     | A        | C | 5B | C3106   | B        | C | 6A | C3720   | B        | C | 1B | C4860   | A        | C | 1C | C6132   | A        | C | 2A | D6111   | B        | C | 2A | L3103   | B        | C | 6A |
| C1016     | A        | C | 5A | C3107   | B        | C | 6A | C3721   | A        | C | 2B | C4861   | A        | C | 1C | C6133   | B        | C | 4A | D6121   | B        | C | 2A | L3202   | A        | C | 6B |
| C1017     | A        | C | 5B | C3108   | B        | C | 6A | C3722   | B        | C | 1B | C4862   | A        | C | 2C | C6141   | B        | C | 2A | D6131   | B        | C | 3A | L3203   | B        | C | 6C |
| C1018     | B        | C | 1C | C3109   | B        | C | 6B | C3723   | B        | C | 1B | C4863   | A        | C | 2D | C6142   | A        | C | 1A | D6141   | B        | C | 2A | L3204   | A        | C | 5C |
| C1019     | A        | C | 3A | C3110   | B        | C | 6B | C3724   | A        | C | 2B | C4864   | A        | C | 2D | C6144   | B        | C | 4A | D6142   | B        | C | 1A | L3301   | A        | C | 6B |
| C1020     | B        | C | 1D | C3201   | B        | C | 6B | C3725   | A        | C | 2B | C5501   | A        | C | 3D | C6145   | B        | C | 3A | D6143   | B        | C | 1A | L3302   | A        | C | 6B |
| C1021     | A        | C | 1C | C3203   | A        | C | 6B | C4301   | B        | C | 3D | C5502   | A        | C | 3D | C6146   | B        | C | 3A | D6151   | B        | C | 1A | L3303   | B        | C | 6B |
| C1022     | A        | C | 4A | C3204   | A        | C | 6B | C4302   | B        | C | 4C | C5503   | A        | C | 3D | C6151   | B        | C | 2A | D6152   | B        | C | 1A | L3304   | B        | C | 6C |
| C1023     | A        | C | 4A | C3205   | A        | C | 6B | C4303   | B        | C | 4D | C5504   | A        | C | 3D | C6152   | B        | C | 1B | D6153   | B        | C | 2B | L3401   | A        | C | 2B |
| C1024     | A        | C | 5A | C3207   | A        | C | 5B | C4304   | B        | C | 4C | C5505   | A        | C | 2C | C6153   | B        | C | 1A | D6154   | B        | C | 2B | L3402   | A        | C | 2B |
| C1025     | B        | C | 1D | C3208   | A        | C | 5B | C4305   | B        | C | 4C | C5506   | A        | C | 2C | C6154   | B        | C | 1A | D6155   | B        | C | 1A | L3701   | A        | C | 2B |
| C1026     | A        | C | 4A | C3211   | A        | C | 5D | C4306   | B        | C | 4C | C5507   | A        | C | 2C | C6155   | B        | C | 2B | D6401   | B        | C | 2B | L4301   | B        | C | 4C |
| C1027     | A        | C | 4A | C3212   | A        | C | 5D | C4307   | B        | C | 4C | C5508   | A        | C | 3C | C6156   | B        | C | 1A | D7801   | A        | C | 4D | L4302   | B        | C | 4C |
| C1028     | A        | C | 4A | C3213   | A        | C | 5D | C4308   | B        | C | 4C | C5509   | A        | C | 2C | C6157   | B        | C | 2B | IC      |          |   |    | L4303   | B        | C | 4C |
| C1029     | B        | C | 1C | C3214   | A        | C | 6B | C4309   | B        | C | 4C | C5510   | A        | C | 2C | C6158   | B        | C | 1A | IC      |          |   |    | L4304   | B        | C | 4C |
| C1030     | B        | C | 1D | C3215   | A        | C | 6B | C4310   | B        | C | 4C | C5511   | A        | C | 2C | C6159   | B        | C | 1B | IC501   | A        | C | 6A | L4305   | B        | C | 2C |
| C1031     | B        | C | 6A | C3217   | A        | C | 5B | C4311   | B        | C | 4C | C5512   | A        | C | 2D | C6160   | B        | C | 2B | IC502   | A        | C | 6A | L4801   | B        | C | 2C |
| C1032     | A        | C | 4A | C3218   | A        | C | 5D | C4312   | B        | C | 4C | C5513   | A        | C | 3D | C6161   | B        | C | 1B | IC503   | A        | C | 6A | L4851   | A        | C | 1C |
| C1033     | B        | C | 2C | C3219   | A        | C | 5B | C4313   | B        | C | 4C | C5514   | A        | C | 2D | C6162   | B        | C | 2B | IC1001  | A        | C | 4A | L4852   | B        | C | 2C |
| C1034     | A        | C | 1C | C3220   | A        | C | 5C | C4314   | B        | C | 4C | C5515   | A        | C | 3D | C6163   | B        | C | 1B | IC1002  | A        | C | 6A | L4853   | A        | C | 2D |
| C1035     | A        | C | 5B | C3221   | A        | C | 5D | C4315   | B        | C | 4C | C5516   | A        | C | 3D | C6164   | B        | C | 2A | IC1003  | A        | C | 6B | L5501   | A        | C | 3D |
| C1036     | A        | C | 6A | C3222   | A        | C | 6C | C4316   | B        | C | 3C | C5517   | A        | C | 2C | C6165   | B        | C | 2B | IC1004  | A        | C | 5B | L5502   | A        | C | 3D |
| C1037     | A        | C | 3A | C3223   | A        | C | 4C | C4317   | B        | C | 4C | C5518   | A        | C | 3D | C6201   | A        | C | 3A | IC1005  | A        | D | 1D | L5503   | A        | C | 2C |
| C1038     | A        | C | 5B | C3224   | A        | C | 6C | C4318   | B        | C | 4C | C5602   | B        | C | 3D | C6301   | B        | C | 4B | IC1006  | A        | C | 6B | L5504   | A        | C | 3D |
| C1039     | A        | C | 4B | C3227   | B        | C | 6C | C4319   | B        | C | 4C | C5603   | B        | C | 2D | C6302   | B        | C | 3A | IC1007  | A        | C | 6A | L5505   | A        | C | 3D |
| C1401     | B        | C | 4B | C3228   | B        | C | 6C | C4320   | B        | C | 4D | C5604   | B        | C | 2D | C6401   | B        | C | 2B | IC1008  | B        | C | 4B | L5506   | A        | C | 2C |
| C1402     | B        | C | 4B | C3229   | B        | C | 6C | C4321   | B        | C | 4D | C5605   | B        | C | 3D | C6402   | B        | C | 2B | IC1009  | A        | C | 5A | L5601   | B        | C | 3D |
| C1405     | B        | C | 5A | C3230   | B        | C | 6C | C4322   | B        | C | 4D | C5606   | B        | C | 3D | C6403   | B        | C | 2A | IC1010  | A        | C | 5B | L6001   | A        | C | 3A |
| C1406     | B        | C | 5A | C3231   | A        | C | 6C | C4323   | B        | C | 4C | C5607   | B        | C | 3D | C6404   | B        | C | 3B | IC1011  | B        | C | 1C | L6002   | A        | C | 3A |
| C1407     | A        | C | 5A | C3232   | A        | C | 6B | C4324   | B        | C | 4D | C5608   | B        | C | 3D | C7801   | A        | C | 4D | IC1012  | A        | C | 4B | L6101   | A        | C | 2A |
| C1408     | A        | C | 5A | C3301   | A        | C | 6B | C4325   | B        | C | 4C | C5609   | B        | C | 3D | C7802   | A        | C | 4D | IC1401  | B        | C | 5A | L6111   | A        | C | 2A |
| C1411     | B        | C | 5B | C3302   | A        | C | 6B | C4326   | B        | C | 4C | C5610   | B        | C | 3D | C7803   | A        | C | 4D | IC1402  | B        | C | 5A | L6112   | A        | C | 2A |
| C1        |          |   |    |         |          |   |    |         |          |   |    |         |          |   |    |         |          |   |    |         |          |   |    |         |          |   |    |

| REF.No.  | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    | REF.No. | LOCATION |   |    |        |   |   |    |
|----------|----------|---|----|---------|----------|---|----|---------|----------|---|----|---------|----------|---|----|---------|----------|---|----|---------|----------|---|----|--------|---|---|----|
| Q4301    | B        | C | 4C | R1017   | A        | C | 3B | R1450   | B        | C | 5A | R3234   | B        | C | 6C | R4313   | B        | C | 4D | R5511   | A        | C | 2D | R6203  | A | C | 3B |
| Q4302    | B        | C | 4C | R1018   | A        | C | 4A | R1451   | B        | C | 5A | R3235   | B        | C | 6C | R4314   | B        | C | 4C | R5512   | A        | C | 3D | R6204  | A | C | 3A |
| Q4303    | B        | C | 4C | R1019   | B        | C | 1C | R1452   | B        | C | 5A | R3236   | A        | C | 6B | R4315   | B        | C | 4C | R5513   | B        | C | 3D | R6205  | A | C | 3A |
| Q4304    | B        | C | 4C | R1020   | B        | C | 1C | R1453   | B        | C | 5A | R3237   | B        | C | 6C | R4316   | B        | C | 4C | R5514   | A        | C | 2C | R6206  | A | C | 2B |
| Q4305    | B        | C | 4C | R1021   | A        | C | 3B | R1457   | B        | C | 5B | R3301   | A        | C | 6B | R4317   | B        | C | 4C | R5515   | A        | C | 2C | R6301  | B | C | 4B |
| Q4306    | B        | C | 4C | R1022   | A        | C | 5B | R1458   | B        | C | 6A | R3303   | A        | C | 6B | R4318   | B        | C | 4C | R5516   | A        | C | 2D | R6302  | B | C | 4B |
| Q4307    | B        | C | 4C | R1023   | B        | C | 1D | R1459   | B        | C | 6A | R3304   | A        | C | 6C | R4319   | B        | C | 4D | R5517   | A        | C | 3C | R6303  | B | C | 4B |
| Q4308    | B        | C | 4C | R1024   | B        | C | 4B | R1460   | B        | C | 6A | R3306   | A        | C | 6C | R4320   | B        | C | 4C | R5518   | A        | C | 2C | R6304  | B | C | 4B |
| Q4309    | B        | C | 4C | R1025   | A        | C | 2C | R1461   | B        | C | 6A | R3307   | A        | C | 6B | R4321   | B        | C | 4C | R5519   | A        | C | 3D | R6305  | B | C | 4B |
| Q4310    | B        | C | 4C | R1026   | A        | C | 2C | R1462   | B        | C | 5A | R3308   | A        | C | 6C | R4322   | B        | C | 4C | R5602   | B        | C | 3D | R6306  | B | C | 4B |
| Q4801    | B        | C | 1D | R1027   | B        | C | 1C | R1463   | B        | C | 5B | R3309   | A        | C | 6C | R4323   | B        | C | 4C | R5604   | B        | C | 3D | R6307  | B | C | 3B |
| Q4851    | A        | C | 1D | R1028   | B        | C | 1C | R1464   | A        | C | 5A | R3310   | A        | C | 6C | R4324   | B        | C | 4C | R5605   | B        | C | 3D | R6308  | B | C | 3B |
| Q4852    | A        | C | 2C | R1029   | B        | C | 1C | R1465   | A        | C | 4B | R3312   | A        | C | 6C | R4325   | B        | C | 4D | R5606   | B        | C | 3D | R6401  | B | C | 3A |
| Q4853    | A        | C | 1C | R1030   | A        | C | 5B | R1466   | B        | C | 4A | R3313   | A        | C | 6C | R4326   | B        | C | 4C | R5607   | B        | C | 3D | R6402  | B | C | 3A |
| Q6101    | B        | C | 3A | R1031   | B        | C | 1D | R1467   | B        | C | 4A | R3314   | A        | C | 6C | R4327   | B        | C | 4C | R6001   | B        | C | 3A | R6403  | B | C | 3A |
| Q6111    | B        | C | 2A | R1032   | B        | C | 1D | R1468   | B        | C | 4A | R3315   | A        | C | 6B | R4328   | B        | C | 4C | R6002   | B        | C | 3A | R6404  | B | C | 2A |
| Q6112    | A        | C | 2B | R1033   | B        | C | 1D | R1469   | B        | C | 6A | R3316   | A        | C | 6C | R4329   | B        | C | 4C | R6003   | B        | C | 3A | R6405  | B | C | 2B |
| Q6113    | A        | C | 2B | R1034   | A        | C | 4A | R1470   | B        | C | 4A | R3317   | A        | C | 6C | R4330   | B        | C | 4C | R6004   | B        | C | 3A | R7801  | A | C | 4D |
| Q6121    | B        | C | 2A | R1035   | A        | C | 3A | R1471   | B        | C | 5B | R3318   | A        | C | 6C | R4331   | B        | C | 4C | R6005   | B        | C | 4A | R7802  | A | C | 4D |
| Q6131    | B        | C | 3A | R1036   | B        | C | 1D | R1472   | B        | C | 5B | R3319   | A        | C | 6C | R4332   | B        | C | 4C | R6006   | B        | C | 4A | R7803  | A | C | 4D |
| Q6141    | B        | C | 2A | R1037   | A        | C | 5A | R1474   | B        | C | 6A | R3330   | A        | C | 6C | R4333   | B        | C | 4C | R6007   | B        | C | 4A | R7804  | A | C | 4D |
| Q6142    | B        | C | 1A | R1038   | A        | C | 5A | R1475   | B        | C | 6A | R3331   | A        | C | 6C | R4334   | B        | C | 4C | R6008   | B        | C | 4B | R7805  | A | C | 3D |
| Q6143    | B        | C | 1A | R1039   | A        | C | 5B | R1476   | B        | C | 4A | R3332   | A        | C | 6D | R4335   | B        | C | 4C | R6101   | B        | C | 3A | R7808  | A | C | 3D |
| Q6151    | B        | C | 2A | R1040   | B        | C | 1D | R1477   | B        | C | 5B | R3333   | A        | C | 6C | R4336   | B        | C | 4C | R6102   | B        | C | 4A | R7809  | A | C | 3D |
| Q6152    | B        | C | 1A | R1041   | B        | C | 1D | R1478   | B        | C | 5A | R3334   | B        | C | 6C | R4337   | B        | C | 4C | R6103   | B        | C | 4A | R7810  | A | C | 4D |
| Q6153    | B        | C | 2B | R1042   | A        | C | 4A | R1479   | B        | C | 5A | R3335   | B        | C | 6C | R4801   | B        | C | 2C | R6104   | B        | C | 3B | R7811  | A | C | 4D |
| Q6154    | B        | C | 1A | R1043   | A        | C | 4A | R2151   | B        | C | 1B | R3336   | B        | C | 6D | R4802   | B        | C | 2C | R6105   | B        | C | 3B | R7812  | A | C | 4D |
| Q6155    | B        | C | 2B | R1044   | B        | C | 6A | R2152   | B        | C | 1B | R3337   | B        | C | 6C | R4803   | B        | C | 2D | R6111   | B        | C | 2A | R7813  | A | C | 4D |
| Q6156    | B        | C | 1B | R1045   | A        | C | 5A | R3002   | B        | C | 5D | R3338   | B        | C | 6D | R4804   | B        | C | 2C | R6112   | B        | C | 4A | R7814  | A | C | 4D |
| Q6157    | B        | C | 2B | R1046   | A        | C | 4A | R3005   | A        | C | 6D | R3339   | B        | C | 6C | R4805   | B        | C | 1D | R6113   | B        | C | 4A | R7815  | A | C | 4D |
| Q6158    | B        | C | 1A | R1047   | A        | C | 4A | R3006   | A        | C | 5D | R3340   | B        | C | 6C | R4806   | B        | C | 1D | R6114   | A        | C | 2B | R7816  | A | C | 4C |
| Q6201    | A        | C | 2B | R1048   | A        | C | 4A | R3007   | B        | C | 5D | R3341   | B        | C | 6D | R4807   | B        | C | 2D | R6115   | A        | C | 2B | R7817  | A | C | 4D |
| Q6202    | A        | C | 2B | R1049   | A        | C | 4A | R3008   | B        | C | 5D | R3342   | B        | C | 6C | R4808   | B        | C | 2D | R6116   | A        | C | 2B | R7818  | A | C | 4C |
| Q6203    | A        | C | 3B | R1050   | A        | C | 5B | R3010   | B        | C | 5D | R3343   | B        | C | 6C | R4809   | B        | C | 2D | R6117   | A        | C | 2B | R7819  | A | C | 4D |
| Q6301    | B        | C | 4B | R1051   | A        | C | 5A | R3032   | B        | C | 5C | R3344   | A        | C | 6C | R4810   | B        | C | 1D | R6118   | B        | C | 2A | R7820  | A | C | 4D |
| Q6302    | B        | C | 4B | R1052   | A        | C | 4A | R3047   | B        | C | 6C | R3345   | A        | C | 6D | R4811   | B        | C | 1D | R6121   | B        | C | 2A | RA1001 | A | C | 4A |
| Q6303    | B        | C | 4B | R1053   | B        | C | 6A | R3048   | B        | C | 5D | R3346   | A        | C | 6C | R4812   | B        | C | 1D | R6122   | B        | C | 4A | RA1002 | A | C | 4A |
| Q6304    | B        | C | 3B | R1054   | A        | C | 4A | R3049   | B        | C | 5C | R3347   | A        | C | 6D | R4813   | B        | C | 2D | R6123   | B        | C | 4A | RA1003 | A | C | 4A |
| Q6305    | B        | C | 3B | R1055   | A        | C | 6B | R3050   | B        | C | 5D | R3348   | A        | C | 6D | R4814   | B        | C | 2C | R6124   | B        | C | 4A | RA1004 | A | C | 4B |
| Q6401    | B        | C | 3A | R1056   | A        | C | 6B | R3051   | B        | C | 5C | R3349   | A        | C | 6D | R4815   | B        | C | 2C | R6125   | B        | C | 4A | RA1005 | A | C | 4A |
| Q6402    | B        | C | 3B | R1057   | A        | C | 4A | R3052   | B        | C | 5C | R3350   | A        | C | 6C | R4816   | B        | C | 2C | R6126   | B        | C | 4A | RA1006 | A | C | 4A |
| Q6403    | B        | C | 3A | R1058   | A        | C | 5C | R3053   | B        | C | 5D | R3351   | A        | C | 6C | R4817   | B        | C | 2C | R6131   | B        | C | 3A | RA1401 | B | C | 5B |
| Q6404    | B        | C | 2A | R1059   | B        | C | 6A | R3054   | B        | C | 5D | R3357   | A        | C | 6D | R4818   | B        | C | 2D | R6132   | B        | C | 4A | RA1402 | B | C | 5B |
| Q6405    | B        | C | 2A | R1060   | B        | C | 3B | R3055   | B        | C | 5D | R3361   | B        | C | 6C | R4819   | B        | C | 2C | R6133   | B        | C | 4A | RA1403 | B | C | 5B |
| Q6406    | B        | C | 2A | R1061   | B        | C | 1D | R3056   | B        | C | 5D | R3362   | B        | C | 6C | R4820   | B        | C | 2D | R6134   | B        | C | 4A | RA4303 | B | C | 2D |
| Q7801    | A        | C | 4D | R1062   | A        | C | 6A | R3057   | B        | C | 6C | R3363   | B        | C | 6C | R4821   | B        | C | 2C | R6135   | B        | C | 4A | RA4304 | B | C | 2D |
| RESISTOR |          |   |    | R1063   | B        | C | 1D | R3058   | B        | C | 6C | R3364   | B        | C | 6C | R4822   | B        | C | 2D | R6136   | B        | C | 4A | RA4305 | B | C | 2D |
|          |          |   |    | R1064   | A        | C | 5B | R3059   | B        | C | 6C | R3366   | B        | C | 6C | R4823   | B        | C | 2D | R6141   | B        | C | 2A | OTHER  |   |   |    |
| R501     | A        | C | 6A | R1401   | A        | C | 4B | R3060   | B        | C | 6C | R3367   | A        | C | 6C | R4824   | B        | C | 2C | R6142   | B        | C | 4A |        |   |   |    |
| R502     | A        | C | 6A | R1406   | B        | C | 5B | R3061   | B        | C | 5D | R3379   | B        | C | 6D | R4825   | B        | C | 2C | R6143   | B        | C | 4A | F6001  | A | C | 3B |
| R503     | A        | C | 6B | R1407   | B        | C | 5A | R3062   | B        | C | 5D | R3380   | A        | C | 6D | R4851   | A        | C | 2C | R6144   | B        | C | 1A | F6002  | A | C | 3B |
| R504     | A        | C | 6B | R1408   | B        | C | 5A | R3063   | B        | C | 5D | R3703   | A        | C | 1B | R4852   | A        | C | 2C | R6145   | B        | C | 1A | F6003  | A | C | 2B |
| R505     | B        | C | 6B | R1410   | B        | C | 5B | R3101   | B        | C | 5A | R3704   | A        | C |    |         |          |   |    |         |          |   |    |        |   |   |    |



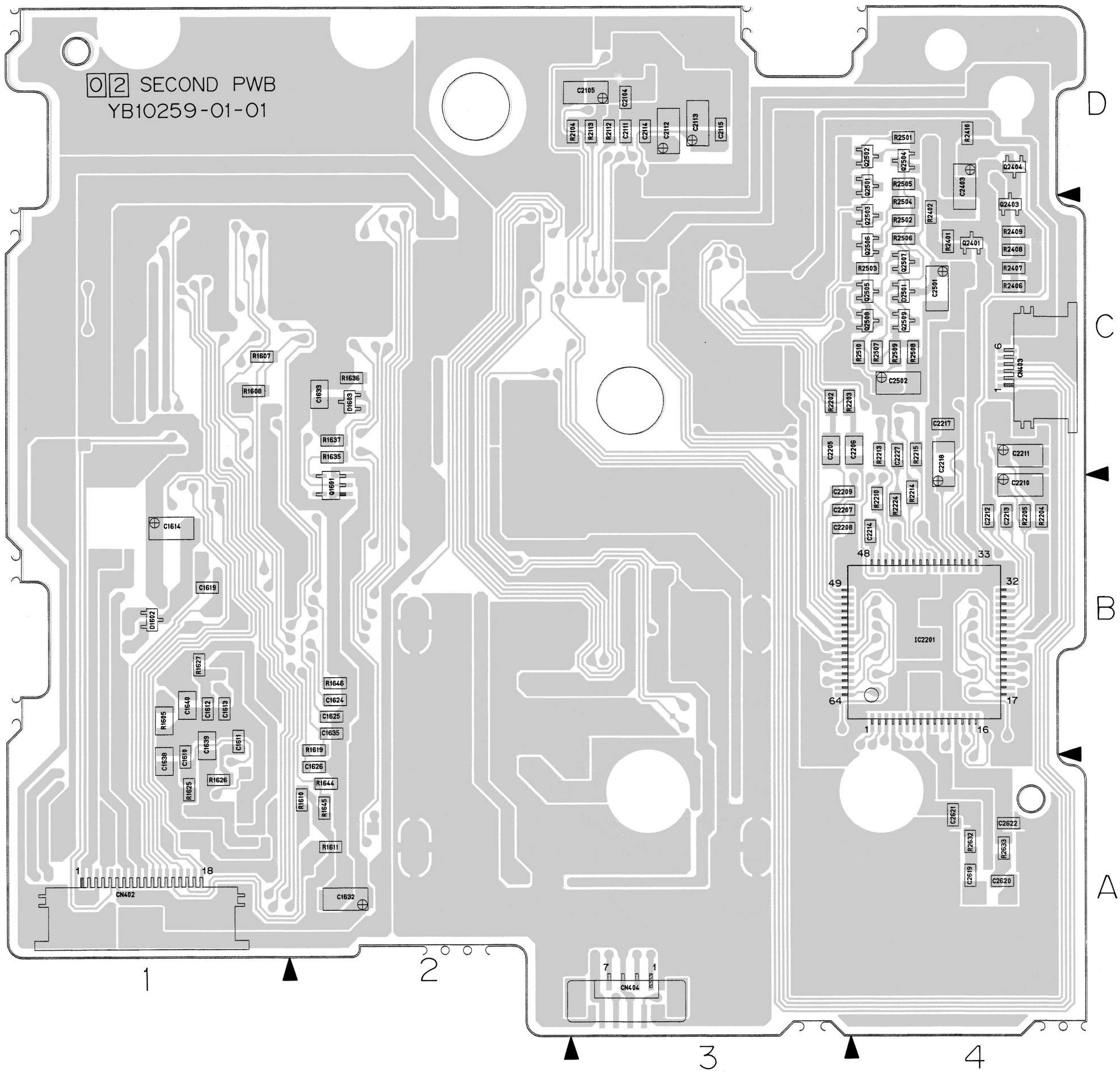
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**ATTENTION:**  
POUR UNE PROTECTION PERMANENTE  
CONTRE LES RISQUE D'INCENDIE,  
REPLACER LE FUSIBLE PAR UN AUTRE  
DE MEME TYPE ET DE MEME TENSION.



4.21 SECOND CIRCUIT BOARD

FOIL SIDE (B)



COMPONENT PARTS LOCATION GUIDE (SECOND)

| REF.No.   | LOCATION | REF.No.   | LOCATION | REF.No.    | LOCATION |
|-----------|----------|-----------|----------|------------|----------|
| CAPACITOR |          | C2610     | A C 4B   | IC2201     | B C 4B   |
| C1601     | A C 1A   | C2611     | A C 4B   | IC3501     | A C 3B   |
| C1602     | A C 2A   | C2612     | A C 4B   | COIL       |          |
| C1603     | A C 2A   | C2613     | A C 3A   | L1601      | A C 2C   |
| C1605     | A C 2A   | C2614     | A C 4A   | L1602      | A C 2B   |
| C1606     | A C 1A   | C2615     | A C 4A   | L2101      | A C 3C   |
| C1607     | A C 1C   | C2616     | A C 4A   | L2201      | A C 3A   |
| C1610     | B C 1B   | C2617     | A C 4B   | L2202      | A C 3A   |
| C1611     | B C 1B   | C2618     | A C 4B   | L2601      | A C 4A   |
| C1612     | B C 1B   | C2619     | B C 4A   | L2602      | A C 4A   |
| C1613     | B C 1B   | C2620     | B C 4A   | L2603      | A C 4A   |
| C1614     | B C 1B   | C2621     | B C 4A   | L3501      | A C 3B   |
| C1615     | A C 1C   | C2622     | B C 4A   | L3502      | A C 3A   |
| C1616     | A C 1C   | C2623     | A C 4A   | L3503      | A C 3A   |
| C1617     | A C 1C   | C2624     | A C 4A   | L3504      | A C 3A   |
| C1618     | A C 1B   | C2631     | A C 4A   | L3505      | A C 2C   |
| C1619     | B C 1B   | C2632     | A C 4B   | L3506      | A C 2B   |
| C1620     | A C 1B   | C2633     | A C 4B   | L3507      | A C 2C   |
| C1621     | A C 1C   | C2634     | A C 4B   | TRANSISTOR |          |
| C1622     | A C 1B   | C2635     | A C 4B   | Q1601      | B C 2B   |
| C1623     | A C 1B   | C2636     | A C 4B   | Q2201      | A C 3C   |
| C1624     | B C 2B   | C2637     | A C 4B   | Q2202      | A C 4C   |
| C1625     | B C 2B   | C2638     | A C 4B   | Q2203      | A C 4C   |
| C1626     | B C 2A   | C2639     | A C 4B   | Q2204      | A C 3C   |
| C1627     | A C 1A   | C2640     | A C 4B   | Q2205      | A C 3C   |
| C1628     | A C 2B   | C2641     | A C 4B   | Q2206      | A C 3C   |
| C1632     | B C 2A   | C2642     | A C 4B   | Q2401      | B C 4C   |
| C1633     | B C 2C   | C3501     | A C 2B   | Q2402      | A C 4C   |
| C1635     | B C 2B   | C3502     | A C 3B   | Q2403      | B C 4C   |
| C1638     | B C 1A   | C3503     | A C 3B   | Q2404      | B C 4D   |
| C1639     | B C 1B   | C3504     | A C 3B   | Q2501      | B C 4D   |
| C1640     | B C 1B   | C3505     | A C 3B   | Q2502      | B C 4D   |
| C2101     | A C 3C   | C3506     | A C 3B   | Q2503      | B C 4C   |
| C2102     | A C 2D   | C3507     | A C 3B   | Q2504      | B C 4D   |
| C2103     | A C 2D   | C3508     | A C 3B   | Q2505      | B C 4C   |
| C2104     | B C 3D   | C3509     | A C 3B   | Q2506      | B C 4C   |
| C2105     | B C 3D   | C3510     | A C 3B   | Q2507      | B C 4C   |
| C2106     | A C 3D   | C3511     | A C 3B   | Q2508      | B C 4C   |
| C2107     | A C 3D   | C3512     | A C 3B   | Q2509      | B C 4C   |
| C2108     | A C 3D   | C3513     | A C 3B   | Q2601      | A C 4B   |
| C2109     | A C 3D   | C3514     | A C 3B   | Q2602      | A C 4B   |
| C2110     | A C 3D   | C3515     | A C 3A   | Q3501      | A C 3A   |
| C2111     | B C 3D   | C3516     | A C 3A   | Q3502      | A C 3A   |
| C2112     | B C 3D   | C3517     | A C 3A   | Q3503      | A C 3A   |
| C2113     | B C 3D   | C3518     | A C 3A   | Q3504      | A C 2A   |
| C2114     | B C 3D   | C3519     | A C 3A   | Q3505      | A C 2B   |
| C2115     | B C 3D   | C3520     | A C 3A   | Q3506      | A C 2B   |
| C2201     | A C 4B   | C3521     | A C 3A   | RESISTOR   |          |
| C2202     | A C 4B   | C3522     | A C 3A   | R1601      | A C 2A   |
| C2203     | A C 4B   | C3523     | A C 3A   | R1602      | A C 2B   |
| C2204     | A C 4B   | C3524     | A C 3A   | R1603      | A C 2A   |
| C2205     | B C 3C   | C3525     | A C 2A   | R1604      | A C 1B   |
| C2206     | B C 4C   | C3526     | A C 2A   | R1605      | B C 1B   |
| C2207     | B C 3B   | C3527     | A C 2A   | R1606      | A C 2C   |
| C2208     | B C 3B   | C3528     | A C 2B   | R1607      | B C 1C   |
| C2209     | B C 3B   | C3529     | A C 2B   | R1608      | B C 1C   |
| C2210     | B C 4C   | C3530     | A C 2B   | R1609      | A C 1C   |
| C2211     | B C 4C   | C3531     | A C 2A   | R1610      | B C 2A   |
| C2212     | B C 4B   | C3532     | A C 2B   | R1611      | B C 2A   |
| C2213     | B C 4B   | C3533     | A C 2A   | R1612      | A C 1B   |
| C2214     | B C 4B   | C3534     | A C 3B   | R1613      | A C 1C   |
| C2215     | A C 4A   | C3535     | A C 2B   | R1614      | A C 2B   |
| C2216     | A C 3A   | CONNECTOR |          | R1615      | A C 2B   |
| C2217     | B C 4C   | CN301     | A C 2C   | R1616      | A C 2B   |
| C2218     | B C 4C   | CN302     | A C 4A   | R1617      | A C 2B   |
| C2219     | A C 4C   | CN304     | A C 3A   | R1618      | A C 2B   |
| C2220     | A C 4C   | CN401     | A C 2A   | R1619      | B C 2B   |
| C2221     | A C 4C   | CN402     | B C 1A   | R1620      | A C 1C   |
| C2222     | A C 4C   | CN403     | B C 4C   | R1621      | A C 2B   |
| C2223     | A C 4C   | CN404     | B C 3A   | R1622      | A C 1C   |
| C2224     | A C 3C   | DIODE     |          | R1623      | A C 1C   |
| C2225     | A C 3C   | D1602     | B C 1B   | R1624      | A C 1A   |
| C2226     | A C 3C   | D1603     | B C 2C   | R1625      | B C 1A   |
| C2401     | A C 4C   | D1604     | A C 2B   | R1626      | B C 1A   |
| C2402     | A C 4C   | D2201     | A C 3C   | R1627      | B C 1B   |
| C2403     | B C 4D   | D2202     | A C 3C   | R1628      | A C 1A   |
| C2501     | B C 4C   | D2203     | A C 4C   | R1629      | A C 2A   |
| C2502     | B C 4C   | D2501     | B C 4C   | R1630      | A C 1C   |
| C2601     | A C 4A   | IC        |          | R1631      | A C 2C   |
| C2602     | A C 4A   | IC1601    | A C 1B   | R1632      | A C 2C   |
| C2603     | A C 4A   | IC2101    | A C 3D   | R1633      | A C 1C   |
| C2604     | A C 4A   |           |          |            |          |
| C2609     | A C 4B   |           |          |            |          |

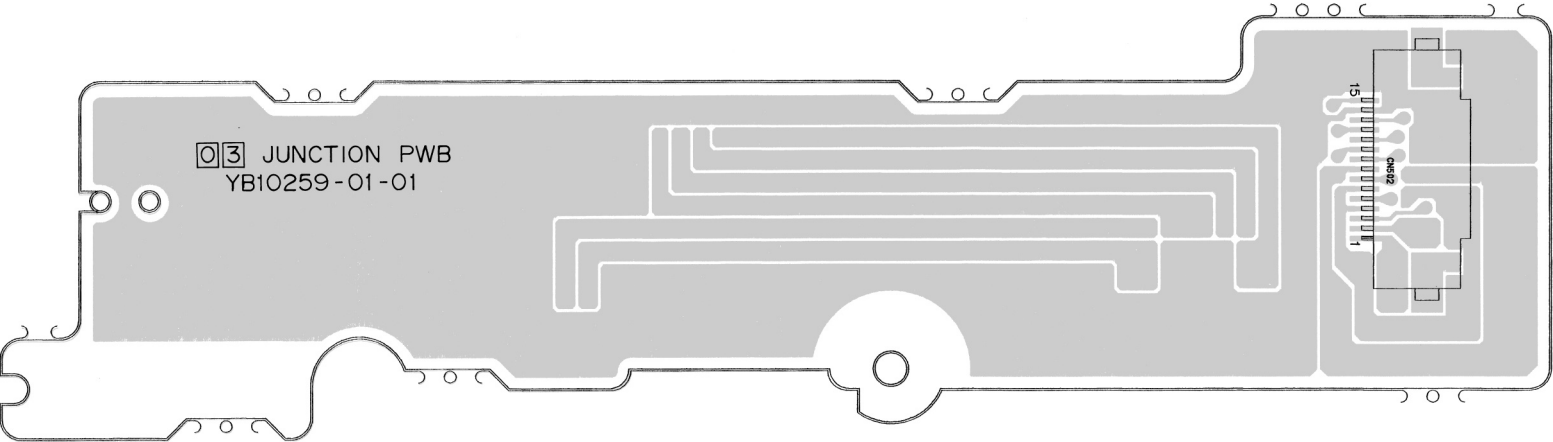


SECOND PWB  
YB10259-01-01

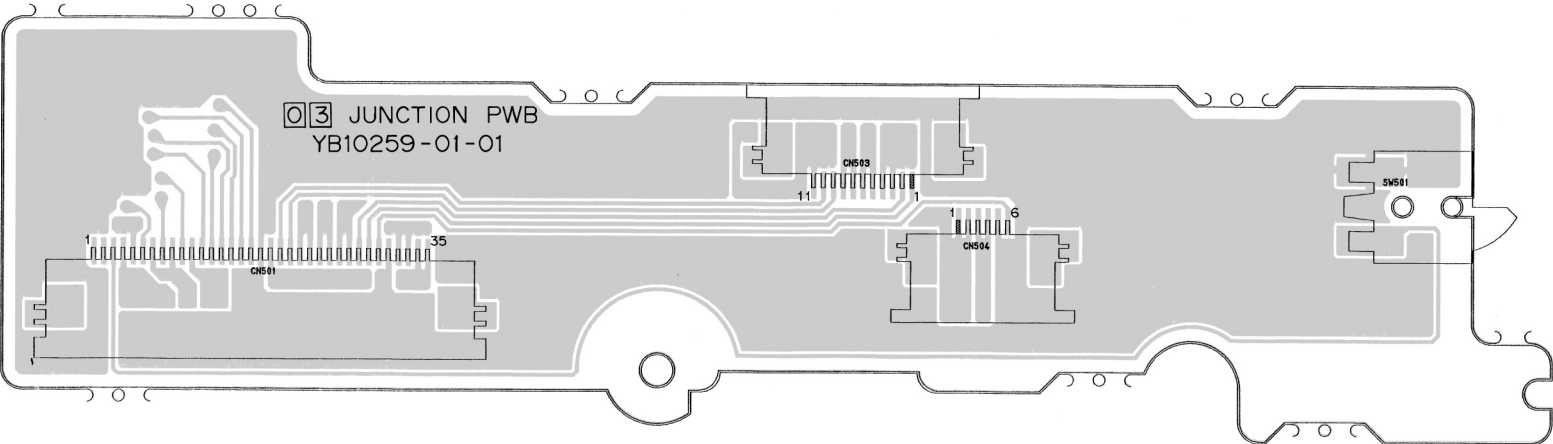
4-49                      4-50



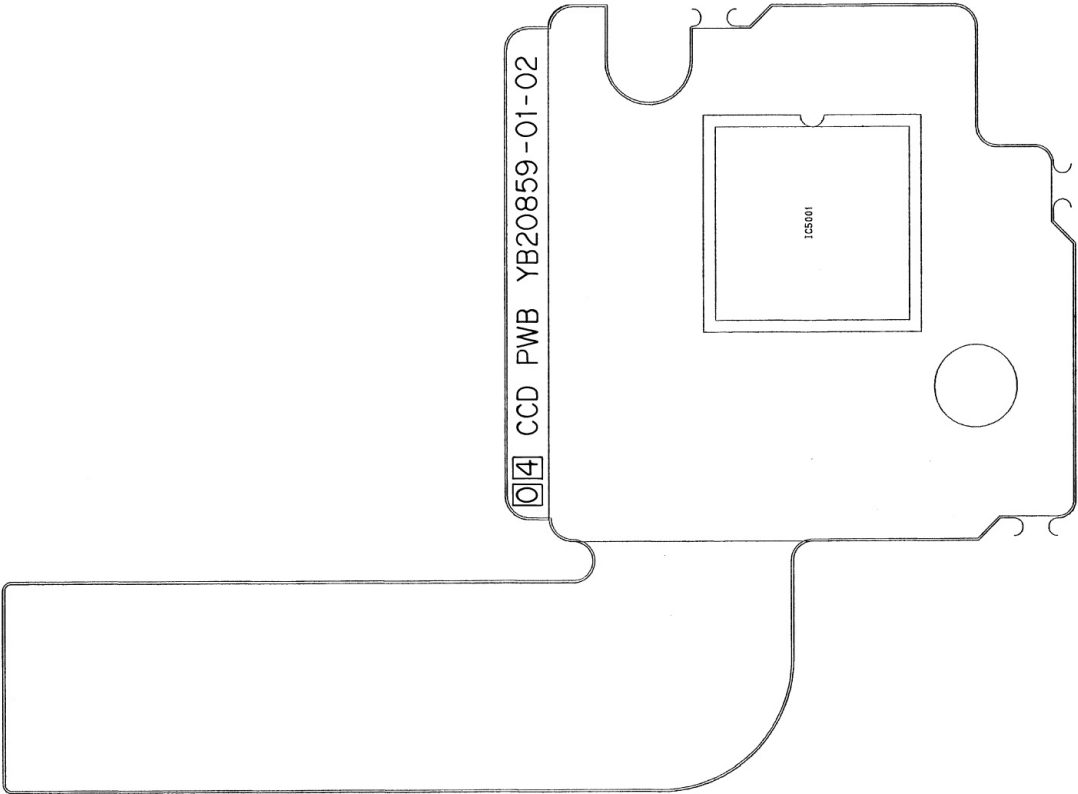
FOIL SIDE (B)



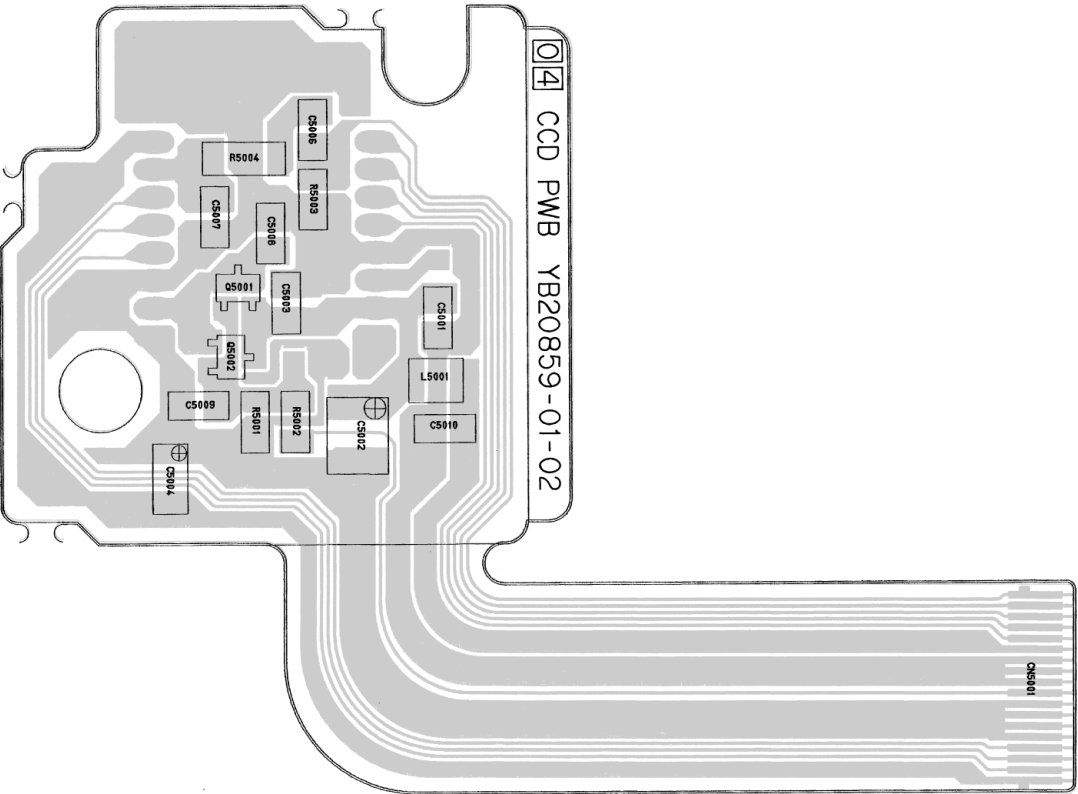
COMPONENT SIDE (A)



FOIL SIDE (B)

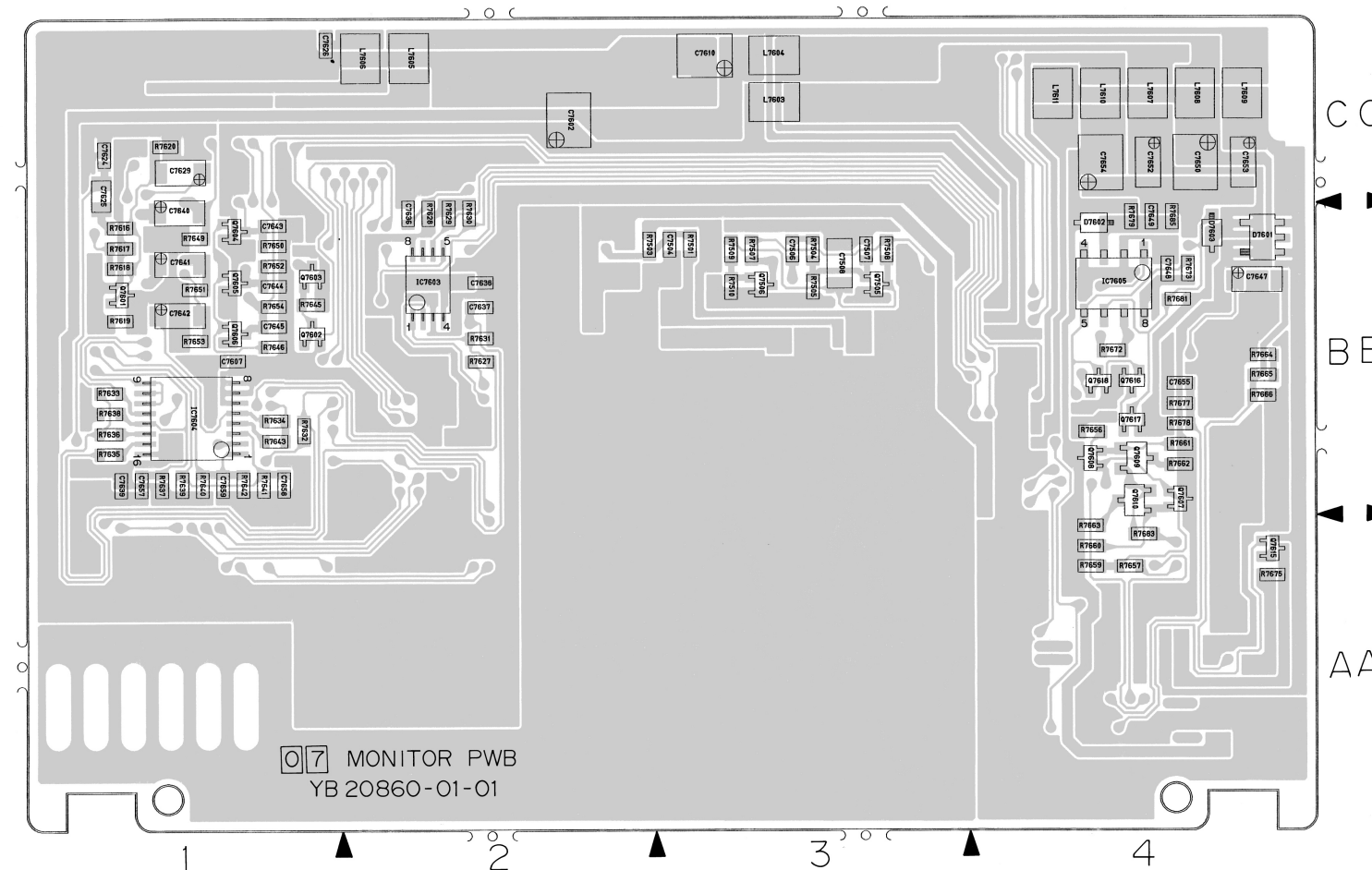


COMPONENT SIDE (A)

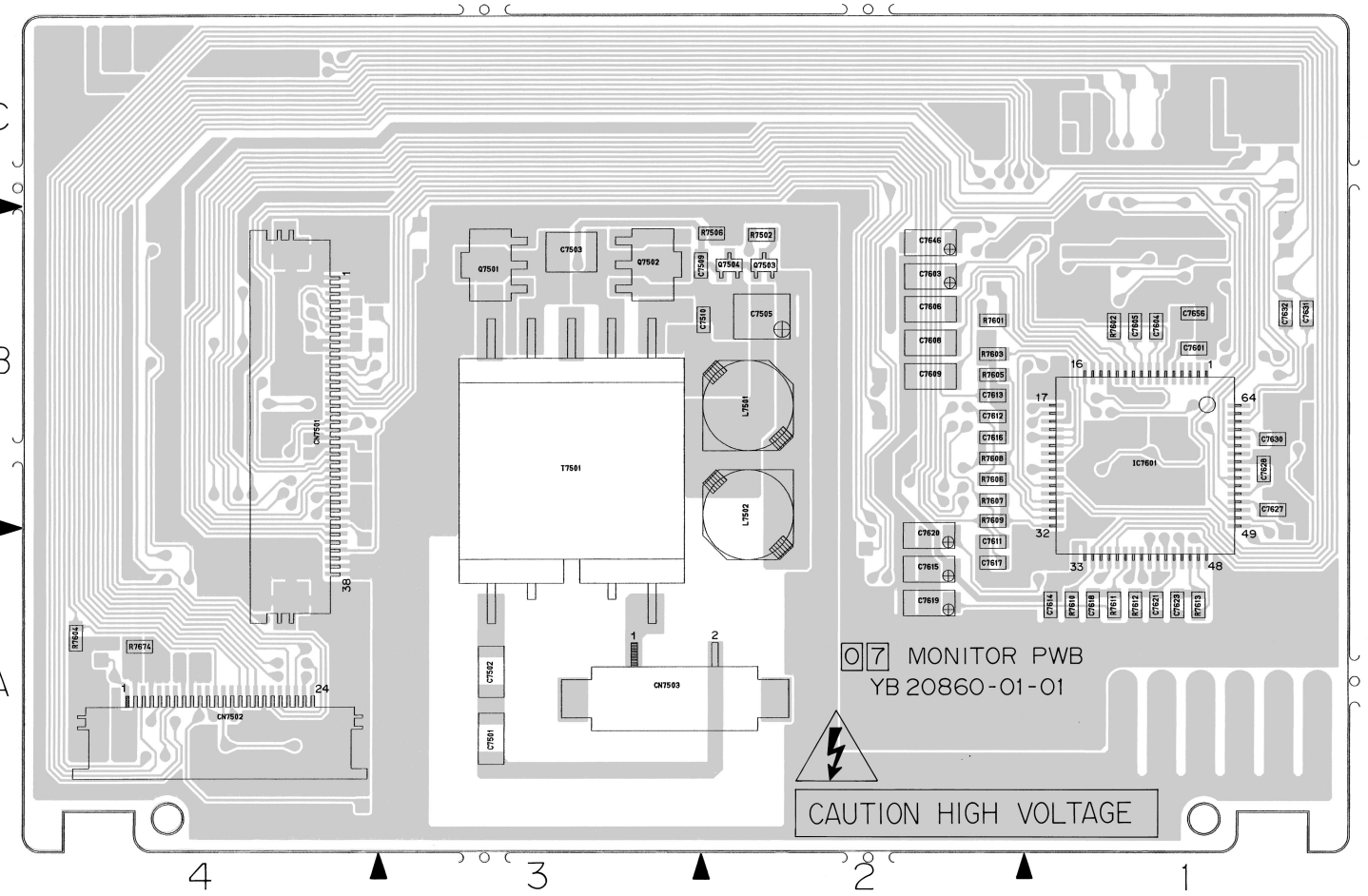


## 4.23 MONITOR CIRCUIT BOARD

**FOIL SIDE (B)**



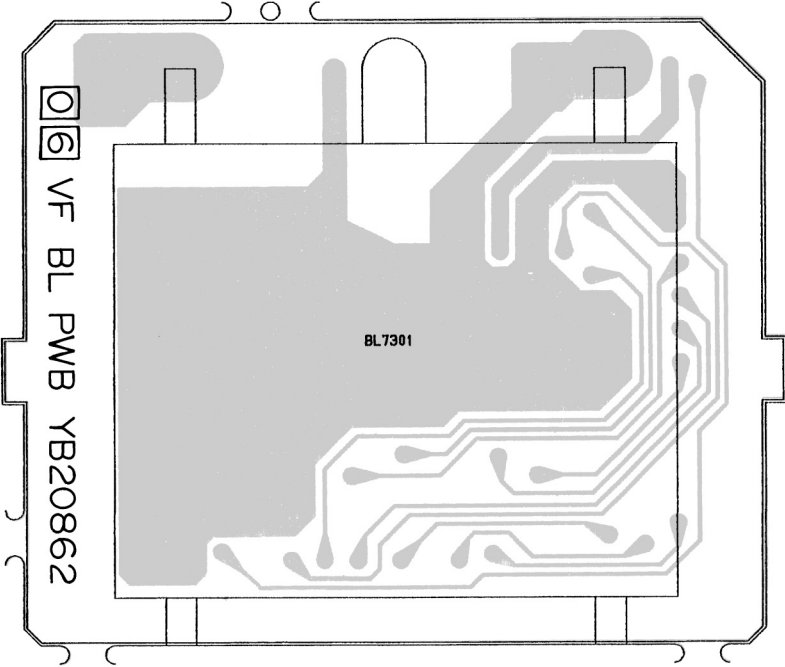
**COMPONENT SIDE (A)**



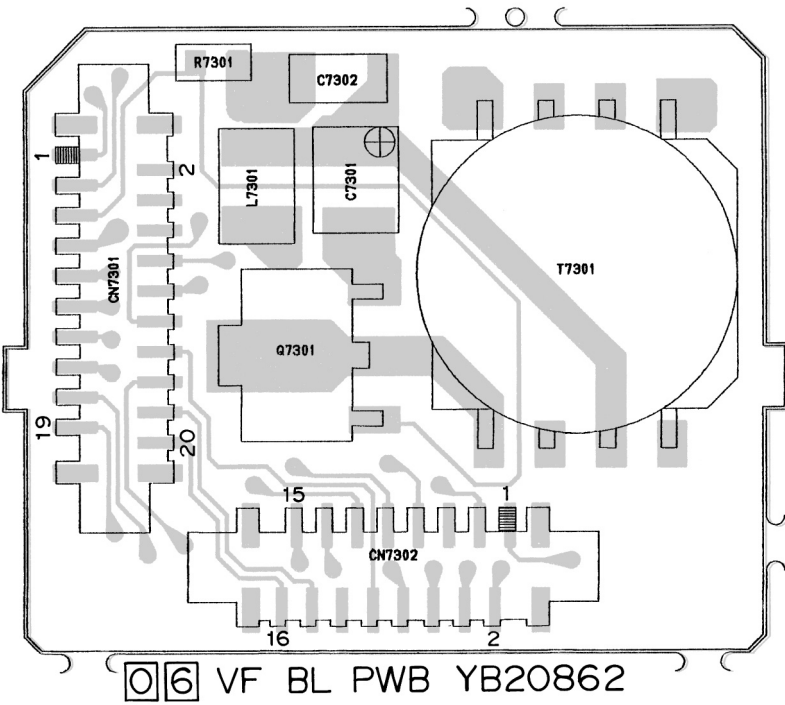
## COMPONENT PARTS LOCATION GUIDE (MONITOR)

| REF.No.   |   |   |    | LOCATION |   |   |    | REF.No.   |   |   |    | LOCATION   |   |   |    | REF.No.  |   |   |       | LOCATION |   |    |       | REF.No. |   |    |    | LOCATION |   |   |    | REF.No. |   |    |    | LOCATION |  |  |  |       |  |  |  |  |  |  |  |
|-----------|---|---|----|----------|---|---|----|-----------|---|---|----|------------|---|---|----|----------|---|---|-------|----------|---|----|-------|---------|---|----|----|----------|---|---|----|---------|---|----|----|----------|--|--|--|-------|--|--|--|--|--|--|--|
| CAPACITOR |   |   |    |          |   |   |    | IC        |   |   |    |            |   |   |    | Q        |   |   |       |          |   |    |       | R       |   |    |    |          |   |   |    | T       |   |    |    |          |  |  |  | OTHER |  |  |  |  |  |  |  |
| C7501     | A | C | 3A | C7616    | A | C | 2A | C7645     | B | C | 1B | IC7601     | A | C | 1B | Q7601    | B | C | 1B    | R7510    | B | C  | 3B    | R7632   | B | C  | 1B | R7662    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7502     | A | C | 3A | C7617    | A | C | 2B | C7646     | A | C | 2B | IC7603     | B | C | 2B | Q7602    | B | C | 1B    | R7510    | B | C  | 3B    | R7633   | B | C  | 1B | R7663    | B | C | 4A |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7503     | A | C | 3B | C7618    | A | C | 1A | C7647     | B | C | 4B | IC7604     | B | C | 1B | Q7603    | B | C | 1B    | R7601    | A | C  | 2B    | R7634   | B | C  | 1B | R7664    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7504     | B | C | 3B | C7619    | A | C | 2A | C7648     | B | C | 4B | IC7605     | B | C | 4B | Q7604    | B | C | 1B    | R7602    | A | C  | 1B    | R7635   | B | C  | 1B | R7665    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7505     | A | C | 2B | C7620    | A | C | 2A | C7649     | B | C | 4B | COIL       |   |   |    | Q7605    | B | C | 1B    | R7603    | A | C  | 2B    | R7636   | B | C  | 1B | R7666    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7506     | B | C | 3B | C7621    | A | C | 1A | C7650     | B | C | 4C |            |   |   |    | Q7606    | B | C | 1B    | R7604    | A | C  | 4A    | R7637   | B | C  | 1B | R7638    | B | C | 1B | R7667   | B | C  | 4B |          |  |  |  |       |  |  |  |  |  |  |  |
| C7507     | B | C | 3B | C7623    | A | C | 1A | C7652     | B | C | 4C | L7501      | A | C | 2B | Q7607    | B | C | 4B    | R7605    | A | C  | 2B    | R7639   | B | C  | 1B | R7670    | A | C | 4A |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7508     | B | C | 3B | C7624    | B | C | 1C | C7653     | B | C | 4C | L7502      | A | C | 2B | Q7608    | B | C | 4B    | R7606    | A | C  | 2B    | R7640   | B | C  | 1B | R7671    | B | C | 4A |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7509     | A | C | 3B | C7625    | B | C | 1C | C7654     | B | C | 4C | L7603      | B | C | 3C | Q7609    | B | C | 4B    | R7607    | A | C  | 2B    | R7641   | B | C  | 1B | R7672    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7510     | A | C | 2B | C7626    | B | C | 1C | C7655     | B | C | 4B | L7604      | B | C | 3C | Q7610    | B | C | 4B    | R7608    | A | C  | 2B    | R7642   | B | C  | 1B | R7673    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7601     | A | C | 1B | C7627    | A | C | 1B | C7656     | A | C | 1B | L7605      | B | C | 2C | Q7615    | B | C | 4A    | R7609    | A | C  | 2B    | R7643   | B | C  | 1B | R7674    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7602     | B | C | 2C | C7628    | A | C | 1B | C7657     | B | C | 1B | L7606      | B | C | 2C | Q7616    | B | C | 4B    | R7610    | A | C  | 1A    | R7644   | B | C  | 1B | R7675    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7603     | A | C | 2B | C7629    | B | C | 1C | C7658     | B | C | 1B | L7607      | B | C | 4C | Q7617    | B | C | 4B    | R7611    | A | C  | 1A    | R7645   | B | C  | 1B | R7676    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7604     | A | C | 1B | C7630    | A | C | 1B | C7659     | B | C | 1B | L7608      | B | C | 4C | Q7618    | B | C | 4B    | R7612    | A | C  | 1A    | R7646   | B | C  | 1B | R7677    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7605     | A | C | 1B | C7631    | A | C | 1B | CONNECTOR |   |   |    | L7609      | B | C | 4C | RESISTOR |   |   |       | R7613    | A | C  | 1A    | R7647   | B | C  | 1B | T7501    |   |   |    | A       | C | 3B |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7606     | A | C | 2B | C7632    | A | C | 1B |           |   |   |    | L7610      | B | C | 4C |          |   |   |       | R7616    | B | C  | 1B    | R7650   | B | C  | 1B |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7607     | B | C | 1B | C7636    | B | C | 2B | CN7501    | A | C | 4B | L7611      | B | C | 4C | R7501    | B | C | 3B    | R7617    | B | C  | 1B    | R7651   | B | C  | 1B |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7608     | A | C | 2B | C7637    | B | C | 2B | CN7502    | A | C | 4A | TRANSISTOR |   |   |    | R7502    | A | C | 2B    | R7618    | B | C  | 1B    | R7652   | B | C  | 1B |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7609     | A | C | 2B | C7638    | B | C | 2B | CN7503    | A | C | 3A |            |   |   |    | Q7501    | A | C | 3B    | R7503    | B | C  | 2B    | R7619   | B | C  | 1B | R7653    | B | C | 1B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7610     | B | C | 3C | C7639    | B | C | 1B | DIODE     |   |   |    | Q7502      | A | C | 3B | R7504    | B | C | 3B    | R7620    | B | C  | 1C    | R7654   | B | C  | 1B |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7611     | A | C | 2A | C7640    | B | C | 1B |           |   |   |    | Q7503      | A | C | 2B | R7505    | B | C | 3B    | R7506    | A | C  | 2B    | R7621   | B | C  | 2B | R7655    | B | C | 4B |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7612     | A | C | 2B | C7641    | B | C | 1B | D7601     | B | C | 4B | Q7504      | A | C | 2B | R7507    | B | C | 3B    | R7622    | B | C  | 2B    | R7656   | B | C  | 4A |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7613     | A | C | 2B | C7642    | B | C | 1B | D7602     | B | C | 4B | Q7505      | B | C | 3B | R7508    | B | C | 3B    | R7623    | B | C  | 2B    | R7657   | B | C  | 4A |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
| C7614     | A | C | 1A | C7643    | B | C | 1B | D7603     | B | C | 4B |            |   |   |    |          |   |   |       | R7624    | B | C  | 2B    | R7658   | B | C  | 4A |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
|           |   |   |    |          |   |   |    |           |   |   |    |            |   |   |    |          |   |   | R7625 | B        | C | 2B | R7659 | B       | C | 4A |    |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
|           |   |   |    |          |   |   |    |           |   |   |    |            |   |   |    |          |   |   | R7626 | B        | C | 2B | R7660 | B       | C | 4A |    |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |
|           |   |   |    |          |   |   |    |           |   |   |    |            |   |   |    |          |   |   | R7627 | B        | C | 2B | R7661 | B       | C | 4B |    |          |   |   |    |         |   |    |    |          |  |  |  |       |  |  |  |  |  |  |  |

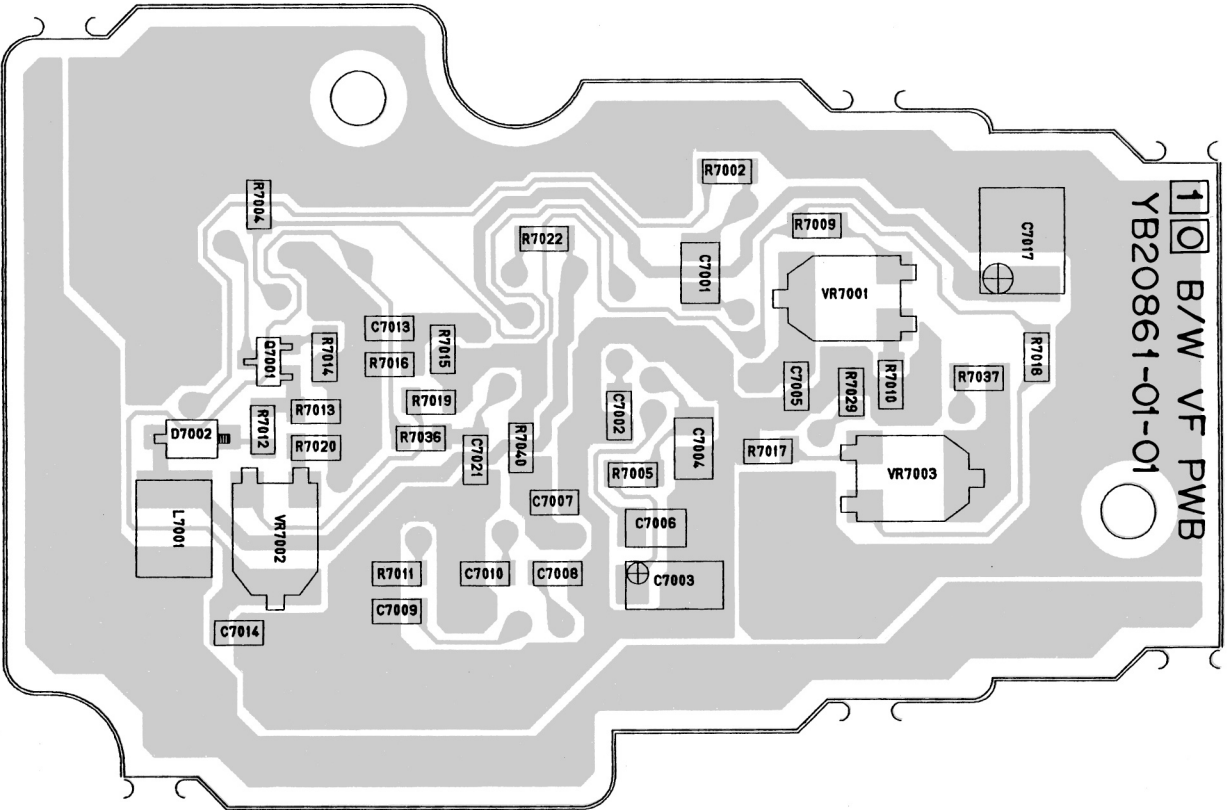
FOIL SIDE (B)



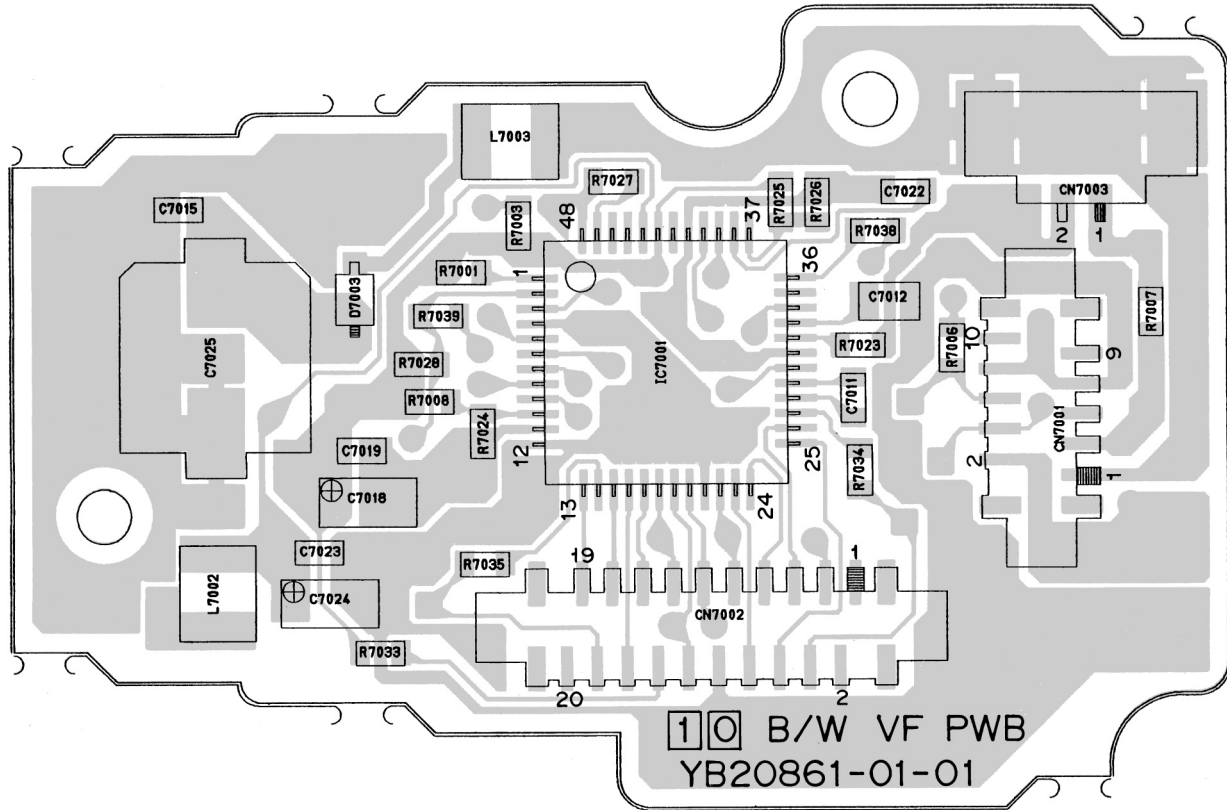
COMPONENT SIDE (A)



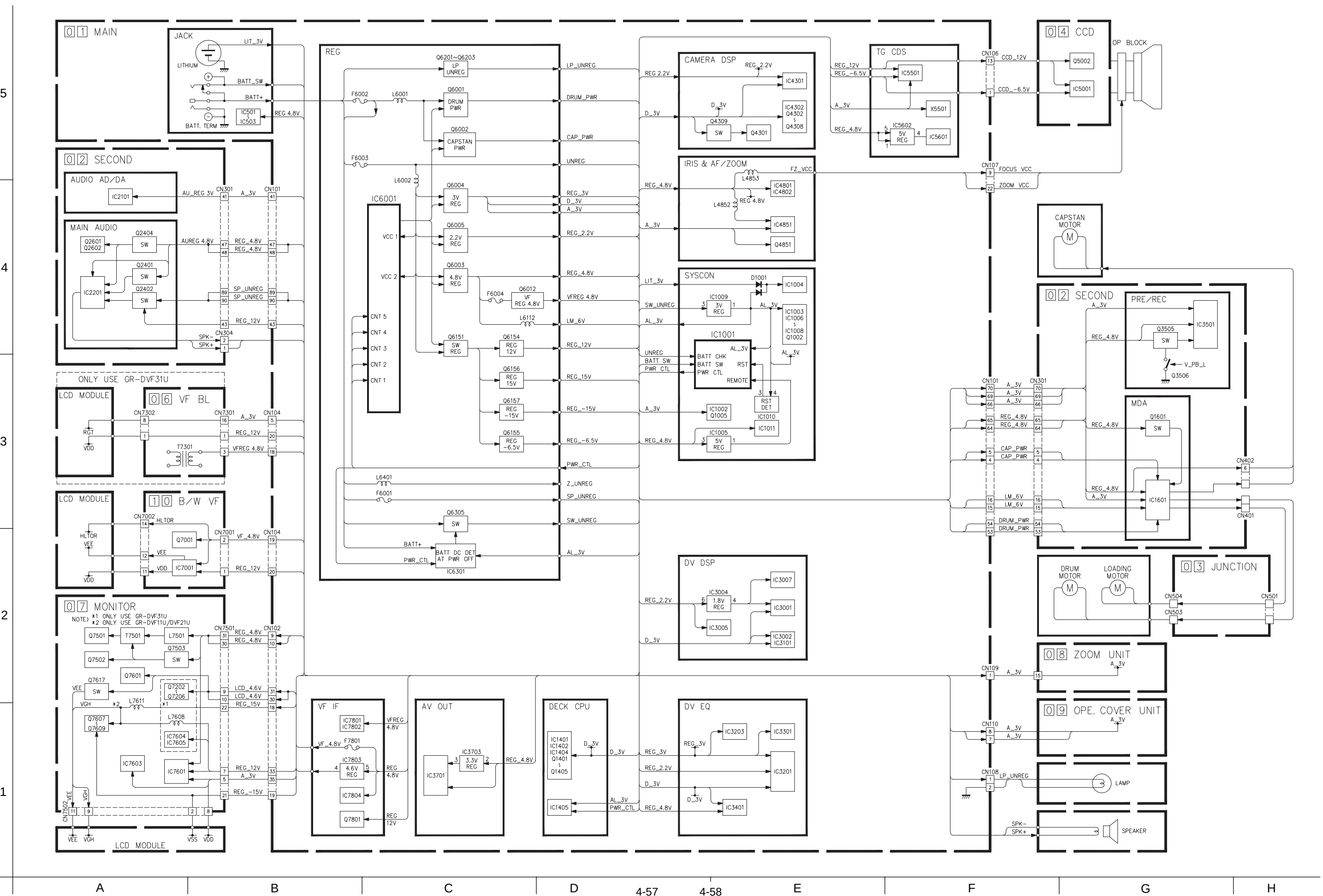
FOIL SIDE (B)



COMPONENT SIDE (A)



4.25 POWER SYSTEM BLOCK DIAGRAM



5









## 5



A

B

C

4-63

4-64

E

F

G

H

## 5



3

2

1

[illegible]

A

B

C

D

4-65

4-66

E

F

G

H

## 4.29 VOLTAGE CHARTS

Note: Parts whose data cannot be obtained by physical measurement (for example, CSP IC, etc.) are omitted from the following chart in some cases.

<MAIN>

| MODE<br>PIN NO. | REC  | PLAY |
|-----------------|------|------|
| CN101           |      |      |
| 1               | 1.6  | 1.6  |
| 2               | 6.6  | 6.7  |
| 3               | 0.8  | 1.5  |
| 4               | 1.6  | 1.6  |
| 5               | 1.6  | 1.6  |
| 6               | 1.5  | 1.5  |
| 7               | 0    | 0    |
| 8               | 0    | 0    |
| 9               | 3    | 3    |
| 10              | 0    | 0    |
| 11              | 1.7  | 1.7  |
| 12              | 1.5  | 1.5  |
| 13              | -4   | 0.6  |
| 14              | -4   | 0.6  |
| 15              | 4.8  | 4.8  |
| 16              | 4.8  | 4.8  |
| 17              | 3    | 1.7  |
| 18              | 3    | 3    |
| 19              | 3    | 3    |
| 20              | -    | -    |
| 21              | 1    | 2.2  |
| 22              | 1.2  | 1.2  |
| 23              | 1.2  | 1.2  |
| 24              | 0    | 0    |
| 25              | 3    | 1.9  |
| 26              | 3    | 3    |
| 27              | 1.6  | 1    |
| 28              | 0    | 1.5  |
| 29              | 0    | 3    |
| 30              | 1.5  | 1.5  |
| 31              | 0    | 0    |
| 32              | 0    | 0    |
| 33              | 0    | 0    |
| 34              | 0    | 0    |
| 35              | 0    | 0    |
| 36              | 1.5  | 0    |
| 37              | 1.5  | 2    |
| 38              | 1.5  | 1.5  |
| 39              | 2.5  | 1.5  |
| 40              | 3    | 0    |
| 41              | 3    | 3    |
| 42              | 0    | 0    |
| 43              | 15.4 | 15.4 |
| 44              | -4   | 3    |
| 45              | 3    | 3    |
| 46              | 3    | 1.6  |
| 47              | 4.8  | 4.8  |
| 48              | 4.7  | 4.8  |
| 49              | 0    | 0.9  |
| 50              | 0    | 0    |
| 51              | 3    | 3    |
| 52              | 0    | 0    |
| 53              | 2.2  | 2.1  |
| 54              | 2.1  | 2.1  |
| 55              | 1.3  | 1.6  |
| 56              | 2.7  | 2.7  |
| 57              | 3    | 3    |
| 58              | 0    | 0    |
| 59              | 0    | 0    |
| 60              | 0    | 0    |
| 61              | 0    | 0    |
| 62              | 0    | 0    |
| 63              | 4.8  | 4.8  |
| 64              | 4.8  | 4.8  |
| 65              | 4.8  | 0    |
| 66              | 3    | 3    |
| 67              | 0    | 0    |
| 68              | 3    | 3    |
| 69              | 3    | 1.1  |
| 70              | 3    | 1.1  |
| 71              | 1.9  | 1.1  |
| 72              | 0    | 0    |
| 73              | 0    | 0    |
| 74              | 0    | 3    |
| 75              | 3    | 0    |
| 76              | 1.5  | 1.5  |
| 77              | 2.9  | 1    |
| 78              | 0    | 0    |
| 79              | 0    | 0    |

| MODE<br>PIN NO. | REC   | PLAY  |
|-----------------|-------|-------|
| 80              | 0     | 1     |
| 81              | 3     | 0     |
| 82              | 3     | 1     |
| 83              | 3     | 3     |
| 84              | 1.5   | 1.5   |
| 85              | 0     | 1     |
| 86              | 3     | 3     |
| 87              | 0     | 0     |
| 88              | 2.6   | 0     |
| 89              | 6.7   | 6.7   |
| 90              | 6.7   | 6.7   |
| 91              | 0     | 0     |
| 92              | 0     | 0     |
| 93              | 0     | 0     |
| 94              | 0     | 0     |
| 95              | 0     | 0     |
| 96              | 3     | 3     |
| 97              | 3     | 0     |
| 98              | 0     | 0     |
| 99              | 0     | 0     |
| 100             | 0     | 0     |
| CN102           |       |       |
| 1               | 0     | 0     |
| 2               | 0     | 0     |
| 3               | 0     | 0     |
| 4               | 0     | 0     |
| 5               | 3     | 3     |
| 6               | 5.8   | 6     |
| 7               | 6     | 6     |
| 8               | 4.8   | 4.8   |
| 9               | 4.8   | 4.8   |
| 10              | 4.8   | 4.8   |
| 11              | 0.7   | 0     |
| 12              | 0.9   | 0.9   |
| 13              | 0     | 0     |
| 14              | 0     | 0     |
| 15              | 1.5   | 1.5   |
| 16              | 2.6   | 2.6   |
| 17              | 0     | 0     |
| 18              | 15.4  | 0     |
| 19              | -15.4 | -15.4 |
| 20              | 3     | 3     |
| 21              | 3     | 0     |
| 22              | 3     | 0     |
| 23              | 0     | 0     |
| 24              | 0     | 0     |
| 25              | 0     | 3     |
| 26              | 0     | 0     |
| 27              | 1.2   | 0     |
| 28              | 3     | 3     |
| 29              | -     | 0     |
| 30              | 4.5   | 4.5   |
| 31              | 4.5   | 4.5   |
| 32              | 1.2   | 1.2   |
| 33              | 0     | 12.1  |
| 34              | 1.3   | 1.3   |
| 35              | 3     | 3     |
| 36              | 2.1   | 2.1   |
| 37              | 0     | 0     |
| 38              | 0     | 0     |
| 39              | 0     | 0     |
| 40              | 3     | 2.9   |
| CN104           |       |       |
| 1               | 5.4   | 5.4   |
| 2               | 5.8   | 5.8   |
| 3               | 6     | 6     |
| 4               | 6     | 6     |
| 5               | 3     | 3     |
| 6               | 0.7   | 0.7   |
| 7               | 0     | 0.9   |
| 8               | 0     | 0     |
| 9               | 0     | 0     |
| 10              | 1.5   | 1.5   |
| 11              | 2.6   | 2.6   |
| 12              | 0     | 0     |
| 13              | 0     | 0     |
| 14              | 0     | 0     |
| 15              | 0     | 0     |
| 16              | 0     | 0     |
| 17              | 2.1   | 2.2   |

| MODE<br>PIN NO. | REC  | PLAY |
|-----------------|------|------|
| 18              | 1.8  | 0    |
| 19              | 4.8  | 4.8  |
| 20              | 12.1 | 12.1 |
| CN105           |      |      |
| 1               | 3    | 3    |
| 2               | 0    | 0    |
| 3               | 0    | 0    |
| 4               | 1.3  | 3    |
| 5               | 1.5  | 3    |
| 6               | 0    | 0    |
| 7               | 3    | 6    |
| 8               | 6    | 6    |
| 9               | 6    | 3    |
| 10              | 2.9  | 0    |
| 11              | 2.9  | 1.5  |
| 12              | 3    | 1.3  |
| 13              | 2.9  | 1.1  |
| 14              | 0    | 0    |
| 15              | 3    | 3    |
| 16              | 3    | 3    |
| 17              | 0    | 0.6  |
| 18              | 0    | 0.8  |
| 19              | 3    | 3    |
| 20              | 3    | 1.9  |
| 21              | 0    | 1.3  |
| 22              | 0    | 0    |
| 23              | 0    | 1.1  |
| 24              | 5.9  | 5.9  |
| 25              | 0    | 0    |
| 26              | 0    | 0    |
| 27              | 3    | 3    |
| 28              | 3    | 3    |
| 29              | 0    | 0    |
| 30              | 0    | 0    |
| CN106           |      |      |
| 1               | 0    | -7   |
| 2               | 1.3  | 0    |
| 3               | 1.5  | 0    |
| 4               | 10.1 | 0    |
| 5               | 0    | 0    |
| 6               | 0    | 0    |
| 7               | 0    | 0    |
| 8               | 0    | 0    |
| 9               | 0    | 6.9  |
| 10              | 0    | 0    |
| 11              | 0    | 0    |
| 12              | 0    | 0    |
| 13              | 12.1 | 12.1 |
| 14              | 0    | 12.1 |
| 15              | 0    | 0    |
| 16              | -6.5 | 12.1 |
| 17              | -6.5 | 0    |
| 18              | 12   | 11.7 |
| CN107           |      |      |
| 1               | 0.9  | 1.9  |
| 2               | 0.7  | 2.1  |
| 3               | 2.2  | 0.5  |
| 4               | 2.2  | 0.4  |
| 5               | 2.2  | 0.4  |
| 6               | 2.2  | 0    |
| 7               | 2.2  | 0    |
| 8               | 2.2  | 0    |
| 9               | 4.8  | 4.8  |
| 10              | 0    | 0    |
| 11              | 5.2  | -    |
| 12              | 1.6  | 1.2  |
| 13              | 1.6  | 2.8  |
| 14              | 1.6  | 1.2  |
| 15              | 0    | 0    |
| 16              | 1.9  | 1.9  |
| 17              | 1.2  | 1.3  |
| 18              | 1.9  | 1.9  |
| 19              | 0    | 2.5  |
| 20              | 0    | 0    |
| 21              | 3.5  | 3.8  |
| 22              | 4.2  | 4.2  |
| CN109           |      |      |
| 1               | 3    | 3    |
| 2               | 3    | 3    |
| 3               | 2.3  | 2.2  |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 4               | 0   | 2.9  |
| 5               | 0   | 3    |
| 6               | 3   | 3    |
| 7               | 3   | 0    |
| 8               | 3   | 3    |
| 9               | 3   | 3    |
| 10              | 0   | 0    |
| 11              | 3   | 3    |
| 12              | 3   | 3    |
| 13              | 0   | 0    |
| 14              | 0   | 0    |
| CN110           |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 0   | 0    |
| 4               | 0   | 0    |
| 5               | 3   | 3    |
| 6               | 3   | 3    |
| 7               | 3   | 3    |
| 8               | 3   | 3    |
| 9               | 3   | 3    |
| 10              | 3   | 3    |

<SECOND>

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| CN401           |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 0   | 0    |
| 4               | 0   | 0    |
| 5               | 0   | 0    |
| 6               | 0   | 0    |
| 7               | 2.5 | 2.4  |
| 8               | 2.4 | 2.3  |
| 9               | 0.9 | 0.8  |
| 10              | 0.9 | 0.9  |
| 11              | 0.8 | 0.9  |
| 12              | 0.8 | 0.9  |
| 13              | 0.8 | 0.9  |
| 14              | 0.8 | 0.9  |
| 15              | 2.5 | 2.5  |
| 16              | 0.8 | 0.8  |
| 17              | 0   | 0    |
| 18              | 0   | 0    |
| 19              | 3   | 3    |
| 20              | 0   | 0    |
| 21              | 3   | 3    |
| 22              | 3   | 3    |
| 23              | 3   | 3    |
| 24              | 2.7 | 2.7  |
| 25              | 0   | 0    |
| 26              | -   | -    |
| 27              | 1.2 | 1.2  |
| 28              | -   | -    |
| 29              | 1.2 | 1.1  |
| 30              | 0.8 | 0.8  |
| 31              | 0   | 0    |
| 32              | 0   | 0    |
| 33              | 3   | 3    |
| 34              | 0   | 0    |
| 35              | 0   | 0    |
| CN402           |     |      |
| 1               | 0.5 | 0.5  |
| 2               | 0.5 | 0.5  |
| 3               | 2.4 | 2.4  |
| 4               | 0   | 0    |
| 5               | 2.4 | 2.4  |
| 6               | 4.8 | 4.8  |
| 7               | 0.6 | 0.6  |
| 8               | 0.6 | 0.6  |
| 9               | 0.5 | 0.5  |
| 10              | 0.5 | 0.5  |
| 11              | 2.4 | 2.4  |
| 12              | 2.4 | 2.4  |
| 13              | 2.4 | 2.4  |
| 14              | 2.4 | 2.4  |
| 15              | 2.4 | 2.4  |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 16              | 2.6 | 2.6  |
| 17              | 2.4 | 2.4  |
| 18              | 2.4 | 2.4  |
| CN403           |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 3   | 3    |
| 4               | 3   | 3    |
| 5               | 3   | 3    |
| 6               | 0   | 0    |
| CN404           |     |      |
| 1               | -   | -    |
| 2               | 0   | 0    |
| 3               | -   | -    |
| 4               | 0   | 0    |
| 5               | -   | -    |
| 6               | 0   | 0    |
| 7               | -   | -    |
| 8               | 0   | 0    |

<JUNCTION>

| MODE<br>PIN NO. | REC  | PLAY |
|-----------------|------|------|
| CN502           |      |      |
| 1               | 0    | 0    |
| 2               | -0.6 | -3.4 |
| 3               | 0.8  | 0.8  |
| 4               | 1.2  |      |
| 5               | -    | -    |
| 6               | 1.2  | 1.2  |
| 7               | -    | -    |
| 8               | 0    | 0    |
| 9               | 0.8  | 0.8  |
| 10              | 3    | 3    |
| 11              | 3    | 3    |
| 12              | 3    | 3    |
| 13              | 0    | 0    |
| 14              | 0    | 0    |
| 15              | 3    | 3    |
| CN503           |      |      |
| 1               | 0    | 2.4  |
| 2               | 0.8  | 2.5  |
| 3               | 2.5  | 0.9  |
| 4               | 0.8  | 0.9  |
| 5               | 0.8  | 0.8  |
| 6               | 0.9  | 0.9  |
| 7               | 0.8  | 0.9  |
| 8               | 0.9  | 0.9  |
| 9               | 0.9  | 2.4  |
| 10              | 2.5  | 0.9  |
| 11              | 2.4  | 0    |
| CN504           |      |      |
| 1               | 0    | 0    |
| 2               | 0    | 0    |
| 3               | 0    | 0    |
| 4               | 0    | 0    |
| 5               | 0    | 0    |
| 6               | 0    | 0    |

## &lt;JACK&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC501           |     |      |
| 1               | 0   | 0    |
| 2               | 4.8 | 4.8  |
| 3               | 4.8 | 4.8  |
| 4               | 4.8 | 4.8  |
| 5               | 4.8 | 4.8  |
| 6               | 0   | 0    |
| 7               | 0   | 0    |
| 8               | 0   | 0    |
| 9               | 0   | 4.8  |
| 10              | 0   | 0    |
| 11              | 4.8 | 4.8  |
| 12              | 0   | 0    |
| 13              | 0   | 0    |
| 14              | 0   | 0    |
| 15              | 4.9 | 4.8  |
| 16              | 4.8 | 4.8  |
| IC502           |     |      |
| 1               | 4.8 | 4.8  |
| 2               | 0   | 0    |
| 3               | 0   | 0    |
| 4               | 4.8 | 4.9  |
| 5               | 4.8 | 4.8  |
| IC503           |     |      |
| 1               | 4.8 | 4.8  |
| 2               | 4.8 | 4.8  |
| 3               | 0   | 0    |
| 4               | 0   | 0    |
| 5               | 4.8 | 4.8  |
| 6               | 4.8 | 4.8  |
| 7               | 0   | 0    |
| 8               | 4.9 | 4.8  |
| Q501            |     |      |
| E               | 0   | 0    |
| C               | 2.2 | 0.7  |
| B               | 0   | 0    |
| Q502            |     |      |
| E               | 0   | 0    |
| C               | 3   | 3    |
| B               | 0   | 0    |

## &lt;VF IF&gt;

| MODE<br>PIN NO. | REC  | PLAY |
|-----------------|------|------|
| IC7801          |      |      |
| 1               | 3    | 3    |
| 2               | 3    | 3    |
| 3               | 0    | 6.7  |
| 4               | 6.7  | 6.7  |
| 5               | 6.7  | 6.7  |
| IC7802          |      |      |
| 1               | 3    | 3    |
| 2               | 0    | 0    |
| 3               | 0    | 0    |
| 4               | 0    | 0    |
| 5               | 0    | 0    |
| IC7803          |      |      |
| 1               | 0    | 0    |
| 2               | 0    | 0    |
| 3               | 1.3  | 1.3  |
| 4               | 4.5  | 4.5  |
| 5               | 4.8  | 4.8  |
| Q7801           |      |      |
| 1               | 5.4  | 5.4  |
| 2               | 6    | 6    |
| 3               | 0    | 0    |
| 4               | 0    | 6    |
| 5               | 0    | 5.5  |
| 6               | 12.1 | 12.1 |

## &lt;SYSCON&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC1001          |     |      |
| 1               | 3   | 0    |
| 2               | 0   | 0    |
| 3               | 0   | 0    |
| 4               | 0   | 2.9  |
| 5               | 0.7 | 2.8  |
| 6               | 0.7 | 0.6  |
| 7               | 3   | 3    |
| 8               | 0   | 0    |
| 9               | 0   | 0.5  |
| 10              | 0   | 1.1  |
| 11              | 0.7 | 0    |
| 12              | 0.7 | 1.5  |
| 13              | 0.7 | 0.6  |
| 14              | 0.7 | 2.2  |
| 15              | 0.7 | 0.8  |
| 16              | 3   | 3    |
| 17              | 3   | 1.1  |
| 18              | 0.7 | 0    |
| 19              | 0.7 | 0    |
| 20              | 0.7 | 3    |
| 21              | 0.7 | 3    |
| 22              | 0.7 | 3    |
| 23              | 0   | 0    |
| 24              | 0   | 0    |
| 25              | 3   | 3    |
| 26              | 0   | 1.9  |
| 27              | 1.2 | 1.2  |
| 28              | 0   | 0    |
| 29              | 3   | 3    |
| 30              | 1.5 | 1.5  |
| 31              | 1.4 | 1.4  |
| 32              | 0   | 0    |
| 33              | 1.5 | 1.5  |
| 34              | 2.9 | 3    |
| 35              | 0   | 3    |
| 36              | 0   | 3    |
| 37              | 0   | 0    |
| 38              | 3   | 3    |
| 39              | 2.9 | 2.9  |
| 40              | 0   | 0    |
| 41              | 0   | 0    |
| 42              | 0   | 0    |
| 43              | 0.9 | -    |
| 44              | 0   | 0    |
| 45              | 0.5 | 0    |
| 46              | 3   | 3    |
| 47              | 0   | 0    |
| 48              | 0   | 0    |
| 49              | 3   | 3    |
| 50              | 3   | 3    |
| 51              | 1.5 | 1.5  |
| 52              | 0   | 0    |
| 53              | 3   | 3    |
| 54              | 3   | 3    |
| 55              | 3   | 3    |
| 56              | 3   | 3    |
| 57              | 3   | 3    |
| 58              | 0   | 3    |
| 59              | 3   | 0    |
| 60              | 3   | 3    |
| 61              | 3   | 3    |
| 62              | 3   | 3    |
| 63              | 3   | 3    |
| 64              | 3   | 3    |
| 65              | 0   | 0    |
| 66              | 3   | 3    |
| 67              | 3   | 3    |
| 68              | 3   | 3    |
| 69              | 0   | 0    |
| 70              | 0   | 0    |
| 71              | 0   | 0    |
| 72              | 2.4 | 2.4  |
| 73              | 3   | 3    |
| 74              | 3   | 3    |
| 75              | 1.5 | 1.5  |
| 76              | 2.2 | 2.5  |
| 77              | 1.5 | 0    |
| 78              | 0   | 0    |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 79              | 0   | 0    |
| 80              | 0   | 0    |
| 81              | 1.9 | 0    |
| 82              | 0   | 0    |
| 83              | 0   | 0    |
| 84              | 0   | 0    |
| 85              | 0   | 0    |
| 86              | 3   | 3    |
| 87              | 3   | 3    |
| 88              | 0   | 0    |
| 89              | 3   | 3    |
| 90              | 0   | 0    |
| 91              | 3   | 3    |
| 92              | 0   | 0    |
| 93              | 0   | 0    |
| 94              | 2.4 | 2.5  |
| 95              | 2.4 | 2.9  |
| 96              | 2.3 | 1.6  |
| 97              | 0   | 0.5  |
| 98              | 3   | 3    |
| 99              | 0   | 0    |
| 100             | 2.8 | 3    |
| 101             | 2.8 | 3    |
| 102             | 2.8 | 3    |
| 103             | 0   | 3    |
| 104             | 2.8 | 3    |
| 105             | 2.8 | 0    |
| 106             |     | 3    |
| 107             | 0   | 0    |
| 108             | 0   | 0    |
| 109             | 0   | 0    |
| 110             | 3   | 3    |
| 111             | 3   | 3    |
| 112             | 0   | 0    |
| 113             | 0   | 0    |
| 114             | 3   | 3    |
| 115             | 0   | 0    |
| 116             | 0   | 0    |
| 117             | 3   | 3    |
| 118             | 0   | 0    |
| 119             | 3   | 3    |
| 120             | 1.6 | 1.2  |
| 121             | 3   | 3    |
| 122             | 3   | 3    |
| 123             | 3   | 3    |
| 124             | 3   | 3    |
| 125             | 0   | 0    |
| 126             | 0   | 0    |
| 127             | 0   | 0    |
| 128             | 0   | 0    |
| IC1002          |     |      |
| 1               | 2.7 | 2.7  |
| 2               | 0   | 0    |
| 3               | 2.8 | 2.7  |
| 4               | 3   | 0.9  |
| 5               | 3   | 3    |
| 6               | 0   | 0    |
| 7               | 1.2 | 1.2  |
| 8               | 1.2 | 1.2  |
| 9               | 0   | 0    |
| 10              | 0   | 0    |
| 11              | 0   | 0    |
| 12              | 0   | 0    |
| 13              | 0   | 0    |
| 14              | 0   | 0    |
| 15              | 0   | 0    |
| 16              | 0   | 0    |
| 17              | 0   | 0    |
| 18              | 0   | 0    |
| 19              | 2.9 | 2.9  |
| 20              | 0   | 0    |
| IC1003          |     |      |
| 1               | 3   | 3    |
| 2               | 1.9 | 0    |
| 3               | 0.7 | 3    |
| 4               | 0   | 0    |
| 5               | 3   | 0    |
| 6               | 3   | 3    |
| 7               | 3   | 3    |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 8               | 3   | 3    |
| IC1004          |     |      |
| 1               | 0   | 0    |
| 2               | 3   | 0    |
| 3               | 1.9 | 3    |
| 4               | 0   | 0    |
| 5               | 0   | 0    |
| 6               | 0.5 | 0.5  |
| 7               | 0.4 | 0.8  |
| 8               | 3.1 | 3.1  |
| IC1005          |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 4.8 | 2.9  |
| IC1006          |     |      |
| 1               | 3   | 3    |
| 2               | 3   | 0    |
| 3               | 0   | 0    |
| 4               | 0   | 0    |
| 5               | 3   | 3    |
| 6               | 3   | 3    |
| 7               | 0   | 0    |
| 8               | 3   | 3    |
| IC1007          |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 0   | 0    |
| 4               | 0   | 0    |
| 5               | 0   | 0    |
| 6               | 0   | 0    |
| 7               | 0   | 0    |
| 8               | 3   | 3    |
| IC1008          |     |      |
| 1               | 3   | 3    |
| 2               | 3   | 3    |
| 3               | 3   | 3    |
| 4               | 0   | 0    |
| 5               | 3   | 3    |
| 6               | 3   | 3    |
| 7               | 3   | 3    |
| 8               | 3   | 3    |
| IC1009          |     |      |
| 1               | 2.9 | 3    |
| 2               | 0   | 0    |
| 3               | 6.7 | 6.7  |
| IC1010          |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 0   | 0    |
| 4               | 3   | 3    |
| 5               | 2.4 | 2.4  |
| 6               | 0   | 2.4  |
| 7               | 0   | 0    |
| 8               | 4.8 | 4.8  |
| IC1011          |     |      |
| 1               | 0   | 2.4  |
| 2               | 2.4 | 0    |
| 3               | 0   | 2.4  |
| 4               | 0   | 0    |
| 5               | 2.4 | 2.4  |
| 6               | 0   | 2.4  |
| 7               | 0   | 0    |
| 8               | 4.8 | 4.8  |
| Q1001           |     |      |
| E               | 0   | 0    |
| C               | 4.8 | 4.8  |
| B               | 0   | 0    |
| Q1002           |     |      |
| E               | 3   | 3    |
| C               | 0   | 0    |
| B               | 3   | 3    |
| Q1003           |     |      |
| E               | 6.7 | 6.6  |
| C               | 6.6 | 4.3  |
| B               | 0   | 6.2  |
| Q1004           |     |      |
| E               | 0   | 0    |
| C               | 0   | 4.2  |
| B               | 3   | 0    |
| Q1005           |     |      |
| E               | 0   | 0    |
| C               | 2   | 1.9  |
| B               | -   | -    |

## &lt;DECK CPU&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC1402          |     |      |
| 1               | 0   | 0    |
| 2               | 3   | 3    |
| 3               | -   | -    |
| 4               | 0   | 0    |
| 5               | -   | -    |
| 6               | 0   | 0    |
| 7               | -   | -    |
| 8               | 3   | 3    |
| IC1404          |     |      |
| 1               | 3   | -    |
| 2               | 3   | 3    |
| 3               | 2.9 | 3    |
| 4               | 0   | 0    |
| 5               | 0   | 0    |
| 6               | 0   | 0    |
| 7               | 0   | 0    |
| 8               | 0.6 | 1.4  |
| 9               | 0.6 | 1.4  |
| 10              | 3   | 3    |
| 11              | 3.1 | 3    |
| 12              | 3   | 3    |
| 13              | 3   | 3    |
| 14              | 3   | 3    |
| IC1405          |     |      |
| 1               | 3   | 3    |
| 2               | 3   | 3    |
| 3               | 3   | 3    |
| 4               | 0   | 0    |
| 5               | 3   | 3    |
| 6               | 3   | 3    |
| 7               | 3   | 3    |
| 8               | 3   | 3    |
| Q1401           |     |      |
| E               | 0   | 0    |
| C               | 3   | 3    |
| B               | 0   | 3    |
| Q1402           |     |      |
| E               | 0   | 0    |
| C               | 0   | 0    |
| B               | 0   | 0    |
| Q1403           |     |      |
| E               | 0   | 0    |
| C               | 3   | 3    |
| B               | 0   | 0    |
| Q1404           |     |      |
| E               | 3   | 3    |
| C               | 2.7 | 2.7  |
| B               | 0   | 0    |
| Q1405           |     |      |
| E               | 3   | 3    |
| C               | 0   | 0    |
| B               | 3   | 3    |

## &lt;DV DSP&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC3002          |     |      |
| 1               | 3   | 1.9  |
| 2               | 1.3 | 1.4  |
| 3               | 1.3 | 1.4  |
| 4               | 1.4 | 1.4  |
| 5               | 1.3 | 1.3  |
| 6               | 3   | 3    |
| 7               | 1.4 | 1.4  |
| 8               | 1.3 | 1.4  |
| 9               | 1.4 | 1.5  |
| 10              | 0   | 1.7  |
| 11              | 0   | 1.9  |
| 12              | -   | -    |
| 13              | -   | -    |
| 14              | -   | -    |
| 15              | 0   | 1.9  |
| 16              | 0   | 1.9  |
| 17              | 2.2 | 2.1  |
| 18              | 1.2 | 1.1  |
| 19              | 0   | 1.9  |
| 20              | 0   | 1.9  |
| 21              | 1.6 | 1.8  |
| 22              | 1.5 | 1.6  |
| 23              | 1.6 | 1.7  |
| 24              | 1.5 | 1.5  |
| 25              | 3   | 3    |
| 26              | 0   | 0    |
| 27              | 1.5 | 1.4  |
| 28              | 1.5 | 1.5  |
| 29              | 1.5 | 1.5  |
| 30              | 1.4 | 1.5  |
| 31              | 1.4 | 1.4  |
| 32              | 1.4 | 1.4  |
| 33              | 0   | 2.1  |
| 34              | 1.9 | 2    |
| 35              | 2   | 2    |
| 36              | 0   | 0    |
| 37              | -   | -    |
| 38              | -   | -    |
| 39              | -   | -    |
| 40              | 0   | 0    |
| 41              | 1.3 | 1.3  |
| 42              | 1.3 | 1.3  |
| 43              | 0   | 1.4  |
| 44              | 1.3 | 1.3  |
| 45              | 0   | 0    |
| 46              | 1.4 | 1.4  |
| 47              | 1.3 | 1.3  |
| 48              | 1.4 | 1.4  |
| 49              | 1.5 | 1.5  |
| 50              | 0   | 0    |
| IC3004          |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 0   | 1.3  |
| 4               | 1.8 | 1.8  |
| 5               | 0   | 0    |
| 6               | 2.2 | 2.2  |
| IC3005          |     |      |
| 1               | -   | -    |
| 2               | -   | -    |
| 3               | 0   | 0    |
| 4               | 1.1 | 1.1  |
| 5               | 2.2 | 2.2  |
| IC3007          |     |      |
| 1               | 0   | 1.5  |
| 2               | 1.6 | 0.9  |
| 3               | 0   | 0    |
| 4               | 1.8 | 0.7  |
| 5               | 1.8 | 1.8  |
| IC3101          |     |      |
| 1               | 0   | 3    |
| 2               | 3   | 3    |
| 3               | 0   | 0    |
| 4               | 3   | 3    |
| 5               | 3   | 3    |
| 6               | 3   | 3    |
| 7               | 3   | 0    |
| 8               | 0   | 0    |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 9               | 0   | 1.4  |
| 10              | 0   | 0    |
| 11              | 0   | 1.5  |
| 12              | 0   | 1.5  |
| 13              | 0   | 1.5  |
| 14              | 0   | 1.5  |
| 15              | 0   | 1.5  |
| 16              | 0   | 1.5  |
| 17              | 0   | 0    |
| 18              | 0   | 0    |
| 19              | 3   | 3    |
| 20              | 3   | 3    |
| 21              | 3   | 3    |
| 22              | 3   | 3    |
| 23              | 0   | 0    |
| 24              | 3   | 3    |
| 25              | 3   | 3    |
| 26              | 0   | 3    |
| 27              | 3   | 3    |
| 28              | 0   | 0    |
| 29              | 0   | 0    |
| 30              | 0   | 0    |
| 31              | 3   | 3    |
| 32              | 0   | 0    |
| 33              | 2.2 | 2.2  |
| 34              | 2.2 | 2.2  |
| 35              | 1.6 | -    |
| 36              | 2   | -    |
| 37              | 0   | 0    |
| 38              | 0   | 0    |
| 39              | 1.4 | 1.5  |
| 40              | 1.4 | 1.5  |
| 41              | 0   | 0    |
| 42              | 0   | 0    |
| 43              | 1.5 | 0    |
| 44              | 0   | 1.8  |
| 45              | 0.5 | 1.8  |
| 46              | 0.4 | 1.8  |
| 47              | -   | 1.8  |
| 48              | -   | 1.8  |
| 49              | 0   | 0    |
| 50              | 0   | 0    |
| 51              | 3   | 3    |
| 52              | 0   | 0    |
| 53              | 0   | 0    |
| 54              | 0   | 3    |
| 55              | 3   | 3    |
| 56              | 0   | 0    |
| 57              | 0   | 3    |
| 58              | 3   | 3    |
| 59              | 0   | 0    |
| 60              | 0   | 0.6  |
| 61              | 0   | 0    |
| 62              | 2.7 | 1.6  |
| 63              | 0   | 0    |
| 64              | 0   | 0    |

## &lt;DV EQ&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC3201          |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 0   | 1    |
| 4               | 0   | 1.4  |
| 5               | 0   | 0    |
| 6               | 0   | 0    |
| 7               | 0   | 0    |
| 8               | 0   | 0    |
| 9               | 0   | 0    |
| 10              | 0   | 0    |
| 11              | 0   | 0    |
| 12              | 0   | 0.8  |
| 13              | 0   | 0    |
| 14              | 0   | 0    |
| 15              | 0   | -    |
| 16              | 0   | 0    |
| 17              | 0   | 1.1  |
| 18              | 0   | 3    |
| 19              | 3   | 3    |
| 20              | 3   | 3    |
| 21              | 3   | 3    |
| 22              | 0   | 0    |
| 23              | 0   | 0    |
| 24              | 0   | 0    |
| 25              | 0   | 0    |
| 26              | 0   | 0    |
| 27              | 0   | 0    |
| 28              | 0   | 0    |
| 29              | 0   | 0    |
| 30              | 0   | 0    |
| 31              | 3   | 3    |
| 32              | 0   | 0    |
| 33              | 2.2 | 2.2  |
| 34              | 0   | 0    |
| 35              | 0   | 0    |
| 36              | 0   | 0    |
| 37              | 0   | 0    |
| 38              | 0   | 0    |
| 39              | 0   | 0    |
| 40              | 0   | 0    |
| 41              | 0   | 0    |
| 42              | 0   | 0    |
| 43              | 0   | 0    |
| 44              | 0   | 0    |
| 45              | 0   | 1.1  |
| 46              | 0   | 0    |
| 47              | 0   | 0    |
| 48              | 0   | 1.8  |
| 49              | 3   | 3    |
| 50              | 0   | 0    |
| 51              | 3   | 3    |
| 52              | 0   | 0    |
| 53              | 0   | 0    |
| 54              | 3   | 3    |
| 55              | 3   | 3    |
| 56              | 0.6 | 1.5  |
| 57              | 3   | 3    |
| 58              | 2.2 | 2.2  |
| 59              | 0   | 0    |
| 60              | 3   | 3    |
| 61              | 0   | 0    |
| 62              | 0   | 0    |
| 63              | 0   | 1.5  |
| 64              | 0   | 1.3  |
| 65              | 1.1 | 1    |
| 66              | 1.2 | 1.2  |
| 67              | 0   | 0    |
| 68              | 1.5 | 1.5  |
| 69              | 0   | 0    |
| 70              | 0   | 0    |
| 71              | 0   | 3    |
| 72              | 0   | 0    |
| 73              | 3   | 3    |
| 74              | 3   | 3    |
| 75              | 0   | 2.7  |
| 76              | 0.8 | 1.6  |
| 77              | 0.8 | 1.6  |
| 78              | 0   | 0    |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 79              | 0   | 0    |
| 80              | 3   | 3    |
| 81              | 0   | 0    |
| 82              | 0   | 0    |
| 83              | 0   | 0    |
| 84              | 0   | 0    |
| 85              | 0   | 0    |
| 86              | 3   | 3    |
| 87              | 0   | 0    |
| 88              | 0.4 | 0.7  |
| 89              | 0   | 1.4  |
| 90              | 0   | 0    |
| 91              | 3   | 3    |
| 92              | 0   | 0    |
| 93              | 2.2 | 2.2  |
| 94              | 2.7 | 2.2  |
| 95              | 0.4 | 0.5  |
| 96              | 2.7 | 2.2  |
| 97              | 0   | 0    |
| 98              | 0   | 0    |
| 99              | 2.9 | 3    |
| 100             | 0   | 0    |
| 101             | 0   | 0    |
| 102             | 2.9 | 3    |
| 103             | 0.4 | 0.6  |
| 104             | 0   | 0    |
| 105             | 0   | 0    |
| 106             | 0   | 0    |
| 107             | 3   | 3    |
| 108             | 0   | 0    |
| 109             | 0   | 0    |
| 110             | 0   | 0    |
| 111             | 0   | 0    |
| 112             | 0   | 1.5  |
| 113             | 0   | 0.5  |
| 114             | 0   | 0    |
| 115             | 0   | 0.4  |
| 116             | 0   | 0    |
| 117             | 3   | 3    |
| 118             | 2.2 | 2.2  |
| 119             | 0   | 0    |
| 120             | 3   | 3    |
| IC3203          |     |      |
| 1               | -   | -    |
| 2               | -   | -    |
| 3               | -   | -    |
| 4               | -   | -    |
| 5               | -   | -    |
| 6               | -   | -    |
| 7               | -   | -    |
| 8               | -   | -    |
| IC3301          |     |      |
| 1               | 0   | 1.1  |
| 2               | 2.2 | 1.3  |
| 3               | 0   | 1.5  |
| 4               | 0   | 0.8  |
| 5               | 0   | 1.8  |
| 6               | 1   | 1    |
| 7               | 0   | 1.8  |
| 8               | 0   | 1.1  |
| 9               | 0   | 0    |
| 10              | 0   | 0    |
| 11              | 0   | 0    |
| 12              | 0   | 0    |
| 13              | 3   | 0    |
| 14              | 3   | 3    |
| 15              | 2.7 | 0    |
| 16              | 3   | 3    |
| 17              | 0   | 1.3  |
| 18              | 3   | 1.5  |
| 19              | 0   | 0    |
| 20              | 3   | 1.5  |
| 21              | 0.8 | 1.6  |
| 22              | 0.8 | 1.7  |
| 23              | 3   | 3    |
| 24              | 3   | 3    |
| 25              | 3   | 0    |
| 26              | 3   | 3    |
| 27              | 0   | 0    |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 28              | 0   | 0    |
| 29              | 0   | 0    |
| 30              | 2.4 | 2.4  |
| 31              | 0.7 | 0.8  |
| 32              | 2.3 | 2.4  |
| 33              | 0.7 | 0.8  |
| 34              | 1.9 | 2    |
| 35              | 1.7 | 1.5  |
| 36              | 1.8 | 1.6  |
| 37              | 2.3 | 1.6  |
| 38              | 0   | 1.9  |
| 39              | 0   | 1.4  |
| 40              | 0   | 0    |
| 41              | 0   | 0    |
| 42              | 0   | 0    |
| 43              | 1.6 | 1.6  |
| 44              | 1.3 | 1.4  |
| 45              | 1.3 | 1.3  |
| 46              | 0.8 | 0.8  |
| 47              | -   | -    |
| 48              | -   | -    |
| 49              | 1.3 | 1.3  |
| 50              | 0   | 0.8  |
| 51              | 0   | 0    |
| 52              | 0   | 0    |
| 53              | 0.7 | 0.6  |
| 54              | 1.5 | 1.5  |
| 55              | 3   | 3    |
| 56              | 3   | 3    |
| 57              | 3   | 3    |
| 58              | 3   | 3    |
| 59              | 2.7 | 2.7  |
| 60              | 2.5 | 2.4  |
| 61              | 0   | 1.6  |
| 62              | 2.6 | 2.6  |
| 63              | 1.9 | 2    |
| 64              | 0.4 | 0.8  |
| IC3401          |     |      |
| 1               | 1.5 | 0    |
| 2               | 3   | 0    |
| 3               | 0   | 1.5  |
| 4               | 0.7 | 0.7  |
| 5               | 0   | 0    |
| 6               | 3   | 3    |
| 7               | 3   | 0    |
| 8               | 1.2 | 1.2  |
| 9               | 0   | 1.5  |
| 10              | 1.4 | 1.4  |
| 11              | 1.4 | 1.4  |
| 12              | 3   | 3    |
| 13              | 4.8 | 4.8  |
| 14              | 0   | 0    |
| 15              | 3   | 3    |
| 16              | 1.7 | 1.7  |
| 17              | 1.4 | 1.4  |
| 18              | 1.1 | 1.1  |
| 19              | 0.7 | 0.8  |
| 20              | 2.1 | 2.1  |
| 21              | 2.4 | 2.4  |
| 22              | 1.6 | 1.6  |
| 23              | 3   | 0    |
| 24              | 3.3 | 3.4  |
| 25              | 0   | 0    |
| 26              | 3   | 3    |
| 27              | 3   | 3    |
| 28              | 0   | 0    |
| 29              | 0   | 0    |
| 30              | 1.5 | 1.6  |
| 31              | 2.7 | 0    |
| 32              | 1.6 | 0    |

## &lt;AV OUT&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC3701          |     |      |
| 1               | 0   | 1.9  |
| 2               | 1.4 | 1.4  |
| 3               | 1.4 | 0    |
| 4               | 1.7 | 1.7  |
| 5               | 0   | 0    |
| 6               | 0   | 0    |
| 7               | 0   | 0    |
| 8               | 0   | 0    |
| 9               | 2.4 | 0    |
| 10              | 2.4 | 2.4  |
| 11              | 0   | 1.7  |
| 12              | 1.7 | 1.7  |
| 13              | 0   | 0    |
| 14              | 2   | 2    |
| 15              | 4.8 | 4.8  |
| 16              | 3.6 | 3.5  |
| 17              | 0   | 0    |
| 18              | 1.4 | 1.4  |
| 19              | 1.8 | 1.8  |
| 20              | 2.3 | 2.3  |
| IC3703          |     |      |
| 1               | 0   | 0    |
| 2               | 4.8 | 4.8  |
| 3               | 3.5 | 3.5  |
| 4               | 0   | 0    |
| 5               | 0   | 0    |
| Q3701           |     |      |
| E               | 0   | 0    |
| C               | 1.7 | 1.7  |
| B               | 0   | 0    |

## &lt;CAMERA DSP&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC4302          |     |      |
| 1               | 0   | 0    |
| 2               | 1.5 | 1.2  |
| 3               | 1.3 | 1.1  |
| 4               | 1.4 | 1.4  |
| 5               | 1.1 | 1.1  |
| 6               | 1.1 | 1.1  |
| 7               | 1.3 | 1.1  |
| 8               | 1.3 | 1.6  |
| 9               | 0   | 0    |
| 10              | 0   | 0    |
| 11              | 0   | 0    |
| 12              | 0   | 0    |
| 13              | 2.7 | 2.7  |
| 14              | 2   | 3    |
| 15              | 1.2 | 1.2  |
| 16              | 1.1 | 1.1  |
| 17              | 3   | 3    |
| 18              | 1.4 | 1.4  |
| 19              | 1.2 | 1.3  |
| 20              | 0   | 0    |
| 21              | 1.3 | 1.2  |
| 22              | 1.4 | 1.2  |
| 23              | 3   | 3    |
| 24              | 1.3 | 1.2  |
| 25              | 0   | 1.1  |
| 26              | 0   | 0    |
| 27              | 2   | 2    |
| 28              | 1.3 | 1.2  |
| 29              | 3   | 3    |
| 30              | 1.6 | 1.6  |
| 31              | 1   | 1.1  |
| 32              | 3   | 3    |
| 33              | 0   | 0    |
| 34              | 2.7 | 2.7  |
| 35              | 0   | 0    |
| 36              | 0   | 0    |
| 37              | 0   | 0    |
| 38              | 1.3 | 1.6  |
| 39              | 0.7 | 0.7  |
| 40              | 1.3 | 1.2  |
| 41              | 0   | 0    |

## &lt;IRIS &amp; AF/ZOOM&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC4801          |     |      |
| 1               | 1.5 | 0    |
| 2               | 2.2 | 0.5  |
| 3               | 2.1 | 0    |
| 4               | 4.8 | 4.8  |
| 5               | 0   | 0    |
| 6               | 1.9 | 0    |
| 7               | 2.2 | 0    |
| 8               | 2.6 | 2.5  |
| 9               | 1.9 | 1.9  |
| 10              | 1.9 | 1.9  |
| 11              | 0   | 0    |
| 12              | 0.4 | 0.4  |
| 13              | 0.4 | 0.6  |
| 14              | 1   | 1    |
| IC4802          |     |      |
| 1               | 0   | 0    |
| 2               | 1.6 | 1.3  |
| 3               | 0   | 0    |
| 4               | 0   | 0    |
| 5               | 1.9 | 1.9  |
| 6               | 1.9 | 1.9  |
| 7               | 1.9 | 0    |
| 8               | 4.8 | 4.8  |
| IC4851          |     |      |
| 1               | 0   | 0    |
| 2               | 0.8 | 0    |
| 3               | 0   | 0    |
| 4               | 0   | 0    |
| 5               | 0.4 | 0    |
| 6               | 0   | 0    |
| 7               | 0   | 0    |
| 8               | 3   | 3    |
| 9               | 4.8 | 4.8  |
| 10              | 2.2 | 2.2  |
| 11              | 0   | 0    |
| 12              | 2.2 | 2.3  |
| 13              | 4.8 | 4.8  |
| 14              | 2.2 | 2.2  |
| 15              | 0   | 0    |
| 16              | 2.2 | 2.2  |
| 17              | 0   | 0    |
| 18              | 0   | 0    |
| 19              | 0   | 0    |
| 20              | 0   | 0    |
| 21              | 0   | 0    |
| 22              | 0   | 0    |
| 23              | 4.8 | 4.8  |
| 24              | 2.2 | 2.2  |
| 25              | 0   | 0    |
| 26              | 2.2 | 2.2  |
| 27              | 4.8 | 4.8  |
| 28              | 2.2 | 2.2  |
| 29              | 0   | 0    |
| 30              | 2.2 | 2.2  |
| 31              | 0   | 0    |
| 32              | 0   | 0    |
| 33              | 0   | 0    |
| 34              | 3   | 3    |
| 35              | 3   | 3    |
| 36              | 1.4 | 1.5  |
| 37              | 1.4 | 1.5  |
| 38              | 3   | 3    |
| Q4801           |     |      |
| E               | 0.4 | 0.4  |
| C               | 1   | 1    |
| B               | 1   | 1    |
| Q4851           |     |      |
| E               | 0   | 0    |
| C               | 3.5 | 3.5  |
| B               | 0   | 0    |

## &lt;TG CDS&gt;

| MODE<br>PIN NO. | REC  | PLAY |
|-----------------|------|------|
| IC5501          |      |      |
| 1               | -    | 1.1  |
| 2               | 2.5  | 0    |
| 3               | 3    | 0    |
| 4               | 3    | 3    |
| 5               | 0    | 0    |
| 6               | 3    | 3    |
| 7               | 0    | 0    |
| 8               | 0.6  | 0    |
| 9               | 0    | 0    |
| 10              | 3    | 3    |
| 11              | 1.4  | 0    |
| 12              | 3    | 3    |
| 13              | 0    | 0    |
| 14              | 1.4  | 0    |
| 15              | 0    | 0    |
| 16              | 3    | 3    |
| 17              | 0    | 0    |
| 18              | 0    | 0    |
| 19              | 2.4  | 0    |
| 20              | 0    | 0    |
| 21              | 0    | 0    |
| 22              | 3    | 3    |
| 23              | 0    | 0    |
| 24              | 2.9  | 3    |
| 25              | 0    | 3    |
| 26              | 3    | 3    |
| 27              | 0    | 0    |
| 28              | 1.3  | 1.8  |
| 29              | 0    | 0    |
| 30              | 1.4  | 1.6  |
| 31              | 0    | 3    |
| 32              | 0    | 0    |
| 33              | 3    | 3    |
| 34              | 1.5  | 0    |
| 35              | 0    | 0    |
| 36              | 3    | 3    |
| 37              | 3    | 0    |
| 38              | 3    | 0    |
| 39              | 0    | 0    |
| 40              | 0    | 0    |
| 41              | -6.5 | 0    |
| 42              | 0    | 12.1 |
| 43              | 12.1 | 12.1 |
| 44              | -6.5 | 12.1 |
| 45              | -6.5 | 12.1 |
| 46              | 0    | -6.9 |
| 47              | 0    | 0    |
| 48              | 3    | 0    |
| IC5601          |      |      |
| 1               | 0    | 0    |
| 2               | 1.4  | 0    |
| 3               | 1.5  | 3    |
| 4               | 1.4  | 3    |
| 5               | 1.4  | 3    |
| 6               | 1.4  | 0    |
| 7               | 1.5  | 0    |
| 8               | 0.8  | 3    |
| 9               | 1.1  | 0    |
| 10              | 0.7  | 3    |
| 11              | 0    | 0    |
| 12              | 0    | 0    |
| 13              | 0    | 0    |
| 14              | 0    | 0    |
| 15              | 3    | 3    |
| 16              | 1.3  | 0    |
| 17              | 2.9  | 0    |
| 18              | 2.4  | 0    |
| 19              | 2.5  | 0    |
| 20              | 0    | 0    |
| 21              | 3    | 3    |
| 22              | 0    | 0    |
| 23              | 1.5  | 0    |
| 24              | 0    | 0    |
| 25              | 0    | 0    |
| 26              | 3    | 3    |
| 27              | 1.5  | 1.5  |
| 28              | 0    | 0    |
| 29              | 0    | 0    |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 30              | 0   | 0    |
| 31              | 3   | 3    |
| 32              | 1.2 | 1.2  |
| 33              | 1.4 | 1.5  |
| 34              | 1.8 | 1.9  |
| 35              | 1.2 | 1.2  |
| 36              | 0   | 0    |
| 37              | 0   | 3.1  |
| 38              | 3   | 3    |
| 39              | 0   | 0    |
| 40              | 0   | 0    |
| 41              | 3   | 3    |
| 42              | 0   | 0    |
| 43              | 0   | 3    |
| 44              | 3   | 3    |
| 45              | 3   | 3    |
| 46              | 3   | 3    |
| 47              | 0   | 0    |
| 48              | 0   | 0    |
| IC5602          |     |      |
| 1               | 4.8 | 4.8  |
| 2               | 0   | 0    |
| 3               | 1.2 | 1.2  |
| 4               | 3   | 3    |
| 5               | 4.8 | 4.8  |

## &lt;REG&gt;

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC6001          |     |      |
| 1               | 6.7 | 6.7  |
| 2               | 1   | 1    |
| 3               | 0.9 | 0.9  |
| 4               | 2.2 | 1    |
| 5               | 1   | 1.2  |
| 6               | 1.2 | 2.2  |
| 7               | 2.2 | 2.2  |
| 8               | 2.2 | 1    |
| 9               | 1   | 1    |
| 10              | 1.3 | 1.3  |
| 11              | 2.2 | 2.2  |
| 12              | 1   | 1    |
| 13              | 1.2 | 1.2  |
| 14              | 1   | 1    |
| 15              | 0   | 0.9  |
| 16              | 1   | 1    |
| 17              | 1   | 0    |
| 18              | 1   | 1    |
| 19              | 1   | 1    |
| 20              | 0.8 | 0.5  |
| 21              | 0.4 | 0.4  |
| 22              | 0.4 | 0.4  |
| 23              | 0.8 | 0.8  |
| 24              | 0   | 0    |
| 25              | 0   | 0    |
| 26              | 0.7 | 0.7  |
| 27              | 0   | 0    |
| 28              | 0   | 0    |
| 29              | 0   | 0    |
| 30              | 3   | 3    |
| 31              | 3   | 3    |
| 32              | 3   | 3    |
| 33              | 3   | 3    |
| 34              | 3   | 3    |
| 35              | 6.7 | 6.7  |
| 36              | 2.6 | 2.6  |
| 37              | 0   | 0    |
| 38              | 0   | 0    |
| 39              | 3.5 | 3.4  |
| 40              | 5   | 4.9  |
| 41              | 4.5 | 4.4  |
| 42              | 0   | 0    |
| 43              | 1.6 | 1.6  |
| 44              | 6.7 | 6.7  |
| 45              | 2.3 | 2.3  |
| 46              | 2.7 | 2.7  |



| MODE<br>PIN NO. | REC   | PLAY  |
|-----------------|-------|-------|
| 47              | 0     | 0     |
| 48              | 0     | 0     |
| IC6301          |       |       |
| 1               | 6.7   | 6.7   |
| 2               | 6.4   | 6.4   |
| 3               | 0     | 0     |
| 4               | 0     | 0     |
| Q6101           |       |       |
| G               | 3.5   | 3.4   |
| D               | 3.1   | 3.1   |
| S               | 6.7   | 6.7   |
| Q6111           |       |       |
| G               | 3.5   | 1.6   |
| D               | 3.1   | 4.9   |
| S               | 6.7   | 6.7   |
| Q6112           |       |       |
| E               | 4.8   | 4.8   |
| C               | 0     | 0     |
| B               | 4.8   | 4.8   |
| Q6113           |       |       |
| E               | 0     | 0     |
| C               | 4.8   | 4.8   |
| B               | 0     | 0     |
| Q6121           |       |       |
| G               | 4.4   | 4.5   |
| D               | 2.2   | 2.2   |
| S               | 6.7   | 6.7   |
| Q6131           |       |       |
| G               | 1.6   | 1.6   |
| D               | 5     | 5     |
| S               | 6.7   | 6.7   |
| Q6141           |       |       |
| G               | 4.3   | 4.3   |
| D               | 2.3   | 2.3   |
| S               | 6.7   | 6.7   |
| Q6142           |       |       |
| E               | 6.7   | 6.7   |
| C               | 4.3   | 4.3   |
| B               | 0     | 6.3   |
| Q6143           |       |       |
| E               | 0     | 0     |
| C               | 4.3   | 4.3   |
| B               | 0     | 0     |
| Q6151           |       |       |
| G               | 2.7   | 2.7   |
| D               | 0     | 0     |
| S               | 6.7   | 6.7   |
| Q6152           |       |       |
| 1               | 4.3   | 4.3   |
| 2               | 4.8   | 4.9   |
| 3               | 15.4  | 15.4  |
| 4               | 4.3   | 4.3   |
| 5               | -     | 4.8   |
| 6               | 16    | 16    |
| Q6153           |       |       |
| 1               | -6.4  | 0     |
| 2               | -6.9  | -7    |
| 3               | -13.8 | -16.1 |
| 4               | -6.4  | -14.1 |
| 5               | -6.8  | -6.8  |
| 6               | -16.1 | -16.1 |
| Q6154           |       |       |
| E               | 0     | 16    |
| C               | 12.1  | 12.1  |
| B               | 15.4  | 15.4  |
| Q6155           |       |       |
| E               | -14.4 | -16.1 |
| C               | -6.9  | -7    |
| B               | -13.8 | -15.9 |
| Q6156           |       |       |
| E               | 15.4  | 15.4  |
| C               | 16    | 16    |
| B               | 16    | 16    |
| Q6157           |       |       |
| E               | -15.7 | -15.4 |
| C               | -16.1 | -16.2 |
| B               | -16.1 | -16.1 |

| MODE<br>PIN NO. | REC  | PLAY |
|-----------------|------|------|
| Q6158           |      |      |
| E               | 0    | 0    |
| C               | 16   | 16   |
| B               | -0.7 | -0.7 |
| Q6201           |      |      |
| E               | 6.7  | 6.7  |
| C               | 0    | 0    |
| B               | 6.7  | 6.7  |
| Q6202           |      |      |
| E               | 0    | 0    |
| C               | 6.7  | 6.7  |
| B               | 0    | 0    |
| Q6203           |      |      |
| E               | 0    | 0    |
| C               | 0    | 0    |
| B               | 0    | 0    |
| Q6301           |      |      |
| E               | 0    | 0    |
| C               | 0    | 0    |
| B               | 3    | 3    |
| Q6302           |      |      |
| G               | 0    | 0    |
| D               | 6.4  | 6.4  |
| S               | 0    | 0    |
| Q6303           |      |      |
| G               | 3    | 3    |
| D               | 0    | 0    |
| S               | 3.9  | 0    |
| Q6304           |      |      |
| G               | 6.7  | 6.7  |
| D               | 0    | 0    |
| S               | 0    | 0    |
| Q6305           |      |      |
| G               | 0    | 0    |
| D               | 6.7  | 6.7  |
| S               | 6.7  | 6.7  |

<MDA>

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC1601          |     |      |
| 1               | 0   | 0    |
| 2               | 0.9 | 0.9  |
| 3               | 0.9 | 0.9  |
| 4               | 0   | 0    |
| 5               | 0.9 | 0.9  |
| 6               | 0   | 0    |
| 7               | 0   | 0    |
| 8               | 0   | 0    |
| 9               | 0   | 0    |
| 10              | 0   | 0    |
| 11              | 0   | 0    |
| 12              | 0   | 0    |
| 13              | 0   | 0    |
| 14              | 4.8 | 4.8  |
| 15              | 0   | 0    |
| 16              | 0.5 | 0.5  |
| 17              | 0   | 0    |
| 18              | 0.5 | 0.5  |
| 19              | 0   | 0    |
| 20              | 0.5 | 0.5  |
| 21              | 0   | 0    |
| 22              | 0   | 0    |
| 23              | 1.5 | 1.6  |
| 24              | 6.7 | 6.7  |
| 25              | 0   | 2.4  |
| 26              | 2.3 | 2.3  |
| 27              | 2.4 | 2.4  |
| 28              | 2.4 | 2.4  |
| 29              | 2.4 | 2.4  |
| 30              | 2.4 | 2.4  |
| 31              | 1.5 | 1.5  |
| 32              | 2.4 | 2.4  |
| 33              | 2.4 | 2.4  |
| 34              | 2.4 | 2.4  |
| 35              | 4.8 | 4.8  |
| 36              | 3   | 3    |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 37              | 0.8 | 0.8  |
| 38              | 0.6 | 0.6  |
| 39              | 0.6 | 0.6  |
| 40              | 1.2 | 1.2  |
| 41              | 1.6 | 1.6  |
| 42              | 0.6 | 0.6  |
| 43              | 4.8 | 4.8  |
| 44              | 0   | 0    |
| 45              | 0   | 0    |
| 46              | 0   | 0    |
| 47              | 2.4 | 3    |
| 48              | 0   | 0    |
| 49              | 3   | 3    |
| 50              | 2   | 2    |
| 51              | 0   | 0    |
| 52              | 1.6 | 1.6  |
| 53              | 1.1 | 1.1  |
| 54              | 1.1 | 0.6  |
| 55              | 0.6 | 0.6  |
| 56              | 0.6 | 0.6  |
| 57              | 1   | 1    |
| 58              | 0.7 | 0.7  |
| 59              | 0   | 0    |
| 60              | 1.7 | 1.7  |
| 61              | 2.7 | 2.7  |
| 62              | 2.2 | 2.2  |
| 63              | 0   | 2.5  |
| 64              | 2.4 | 2.4  |
| 65              | 2.4 | 2.5  |
| 66              | 0   | 2.4  |
| 67              | 1.5 | 1.5  |
| 68              | 1.6 | 1.6  |
| 69              | 0   | 0    |
| 70              | 0.9 | 0.9  |
| 71              | 1   | 0.9  |
| 72              | 0.9 | 0.8  |
| 73              | 1.6 | 0.9  |
| 74              | 0.4 | 1.6  |
| 75              | 0   | 0    |
| 76              | 6.7 | 0    |
| 77              | 6.7 | 6.7  |
| 78              | 2.1 | 2.1  |
| 79              | 0   | 0    |
| 80              | 0   | 0    |
| Q1601           |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 4.8 | 4.8  |
| 4               | 0   | 0    |
| 5               | 4.8 | 4.8  |

<AUDIO AD/DA>

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC2101          |     |      |
| 1               | 3   | 3    |
| 2               | 3   | 3    |
| 3               | 1.4 | 0    |
| 4               | 0   | 0    |
| 5               | 1.3 | 0    |
| 6               | 1.4 | 0    |
| 7               | 0   | 0    |
| 8               | 0   | 3    |
| 9               | 1.5 | 1.6  |
| 10              | 1.5 | 0    |
| 11              | 1.2 | 0    |
| 12              | 0.5 | 0    |
| 13              | 0   | 0    |
| 14              | 3   | 3    |
| 15              | 1.4 | 0    |
| 16              | 3   | 0    |
| 17              | 0   | 0    |
| 18              | 3   | 3    |
| 19              | 1.4 | 1.4  |
| 20              | 0   | 1.4  |
| 21              | 1.4 | 1.4  |
| 22              | 0   | 0    |
| 23              | 3   | 3    |
| 24              | 3   | 3    |

<AUDIO FADER>

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| Q2501           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |
| Q2502           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |
| Q2503           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |
| Q2504           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |
| Q2505           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |
| Q2506           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |
| Q2507           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |
| Q2508           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |
| Q2509           |     |      |
| E               | -   | -    |
| C               | -   | -    |
| B               | -   | -    |

<MAIN AUDIO>

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| IC2201          |     |      |
| 1               | 1.6 | 0    |
| 2               | 1.6 | 0    |
| 3               | 0.7 | 0    |
| 4               | 1.6 | 1.7  |
| 5               | 1.6 | 1.6  |
| 6               | 1.6 | 1.7  |
| 7               | 0   | 0    |
| 8               | 2.3 | 2.4  |
| 9               | 2.3 | 0    |
| 10              | 0   | 1.7  |
| 11              | 1.6 | 1.6  |
| 12              | 1.6 | 1.7  |
| 13              | 1.6 | 1.7  |
| 14              | 1.4 | 0    |
| 15              | 1.6 | 0    |
| 16              | 1.6 | 1.7  |
| 17              | 2   | 1.7  |
| 18              | 1.6 | 0.9  |
| 19              | 2   | 0    |
| 20              | 2   | 0    |
| 21              | 1.6 | 0    |
| 22              | 1.6 | 3.1  |
| 23              | 1.6 | 0    |
| 24              | 1.6 | 1.7  |
| 25              | 2.3 | 2.1  |
| 26              | 0.9 | 0.5  |
| 27              | 2.4 | 2.2  |
| 28              | 1.6 | 1.7  |
| 29              | 2.4 | 2.4  |
| 30              | 2.4 | 2.1  |
| 31              | 2.4 | 2.4  |
| 32              | 2.4 | 2.1  |
| 33              | 5.5 | 4.8  |
| 34              | 4.7 | 4.7  |
| 35              | 0   | 0    |
| 36              | 2.4 | 2.4  |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| 37              | 4.7 | 4.7  |
| 38              | 2.4 | 2.2  |
| 39              | 3   | 3    |
| 40              | 0   | 0    |
| 41              | 3   | 3    |
| 42              | 2.4 | 2.4  |
| 43              | 2.4 | 2.1  |
| 44              | 3   | 3    |
| 45              | 1.6 | 1.7  |
| 46              | 0   | 0    |
| 47              | 2.4 | 2.4  |
| 48              | 1.6 | 1.7  |
| 49              | 1.6 | 1.7  |
| 50              | 1.6 | 1.7  |
| 51              | 1.6 | 1.7  |
| 52              | 1.6 | 1.5  |
| 53              | 1.6 | 1.5  |
| 54              | 2.9 | 3.1  |
| 55              | 0   | 0    |
| 56              | 2.2 | 2.2  |
| 57              | 1.6 | 1.7  |
| 58              | 1.6 | 0.5  |
| 59              | 2.9 | 3.1  |
| 60              | 1.6 | 0    |
| 61              | 1.8 | 0    |
| 62              | 1.8 | 0    |
| 63              | 1.6 | 1.7  |
| 64              | 1.8 | 1.7  |
| Q2205           |     |      |
| 1               | 0   | 0    |
| 2               | 0   | 0    |
| 3               | 0   | 0    |
| 4               | 0   | 0    |
| 5               | 0   | 0    |
| Q2206           |     |      |
| E               | 0   | 0    |
| C               | 0   | 0    |
| B               | 0   | 0    |
| Q2401           |     |      |
| E               | 2.9 | 3.1  |
| C               | 4.8 | 4.8  |
| B               | 3.6 | 3.8  |
| Q2402           |     |      |
| E               | 4.8 | 4.8  |
| C               | 6.7 | 6.7  |
| B               | 6   | 6    |
| Q2404           |     |      |
| E               | 4.2 | 4.2  |
| C               | 4.8 | 4.8  |
| B               | 4.8 | 4.8  |
| Q2601           |     |      |
| E               | 2.2 | 2.4  |
| C               | 0   | 1.8  |
| B               | 1.6 | 1.7  |
| Q2602           |     |      |
| E               | 2.2 | 2.4  |
| C               | 1.9 | 1.8  |
| B               | 1.6 | 1.7  |

## &lt;PRE/REC&gt;

| MODE<br>PIN NO. | REC  | PLAY |
|-----------------|------|------|
| IC3501          |      |      |
| 1               | 3    | 2.3  |
| 2               | 3    | 1.9  |
| 3               | 3    | 3    |
| 4               | 0    | 0    |
| 5               | 0    | 0    |
| 6               | 0    | 0    |
| 7               | 2.6  | 3    |
| 8               | 1.5  | 1.5  |
| 9               | 1    | 0.9  |
| 10              | 0    | 0    |
| 11              | 3    | 3    |
| 12              | 1.4  | 1.5  |
| 13              | 3    | 3    |
| 14              | 3    | 3    |
| 15              | 2    | 2    |
| 16              | 0    | 0    |
| 17              | -4.6 | -4.5 |
| 18              | 8.7  | 5.5  |
| 19              | 4.8  | 4.8  |
| 20              | 4.7  | 1.4  |
| 21              | 0    | 0.8  |
| 22              | 3    | 2.2  |
| 23              | 0    | 0    |
| 24              | 0    | 0.5  |
| 25              | 3    | 3    |
| 26              | 0    | 0    |
| 27              | 0    | 0    |
| 28              | -4.3 | 1.8  |
| 29              | 4.7  | 0.4  |
| 30              | 4.8  | 4.8  |
| 31              | 0    | 0.5  |
| 32              | -4.5 | 1.9  |
| 33              | 0    | 0    |
| 34              | 0    | 0    |
| 35              | 3    | 3    |
| 36              | 1.1  | 1.1  |
| 37              | 0.9  | 0    |
| 38              | 1.4  | 2.2  |
| 39              | 0.9  | 0.8  |
| 40              | 1.4  | 1.4  |
| 41              | 0    | 0    |
| 42              | 0    | 0    |
| 43              | 3    | 0    |
| 44              | 0    | 3    |
| 45              | 1.5  | 1.5  |
| 46              | 3    | 3    |
| 47              | 0    | 3    |
| 48              | 2.9  | 0    |
| 49              | 0    | 0    |
| 50              | 0    | 0    |
| 51              | 1.4  | 1.5  |
| 52              | 0    | 0    |
| 53              | 0    | 0    |
| 54              | 1.5  | 0    |
| 55              | 1.1  | 2.4  |
| 56              | 0    | 0    |
| 57              | 3    | 1.3  |
| 58              | 3    | 2.3  |
| 59              | 3    | 2.1  |
| 60              | 3    | 3    |
| 61              | 3    | 1.9  |
| 62              | 3    | 2.5  |
| 63              | 0    | 0    |
| 64              | 1.5  | 1    |
| Q3501           |      |      |
| E               | 0    | 0    |
| C               | 2.6  | 1.1  |
| B               | 0.6  | 0.7  |
| Q3502           |      |      |
| E               | 0    | 0    |
| C               | 0    | 0    |
| B               | -5.7 | 0.8  |
| Q3503           |      |      |
| E               | 0    | 0    |
| C               | 0    | 0    |
| B               | 0    | 0    |

| MODE<br>PIN NO. | REC | PLAY |
|-----------------|-----|------|
| Q3504           |     |      |
| E               | 0   | 0    |
| C               | 0.7 | 1.1  |
| B               | 1.1 | 0.7  |
| Q3505           |     |      |
| E               | 4.9 | 4.8  |
| C               | 4.7 | 0.4  |
| B               | 4.1 | 4.8  |
| Q3506           |     |      |
| E               | 0   | 0    |
| C               | 0   | 0    |
| B               | 3   | 0    |

## &lt;CCD&gt;

| MODE<br>PIN NO. | EE   |
|-----------------|------|
| IC5001          |      |
| 1               | -6.5 |
| 2               | -6.5 |
| 3               | 0    |
| 4               | 0    |
| 5               | 0    |
| 6               | 0    |
| 7               | 12.1 |
| 8               | 8.6  |
| 9               | 0    |
| 10              | 10.1 |
| 11              | 1.5  |
| 12              | 1.2  |
| 13              | 8    |
| 14              | -6.9 |
| Q5002           |      |
| E               | 7.9  |
| C               | 12.1 |
| B               | 8.7  |

## &lt;VF BL&gt;

| MODE<br>PIN NO. | EE  |
|-----------------|-----|
| Q7301           |     |
| G               | 0   |
| D               | 1.4 |
| S               | 0   |

## &lt;MONITOR&gt;

| MODE<br>PIN NO. | EE   |
|-----------------|------|
| IC7601          |      |
| 1               | 2.3  |
| 2               | 2.2  |
| 3               | 2.6  |
| 4               | 3.6  |
| 5               | 3.3  |
| 6               | 4.5  |
| 7               | 4.5  |
| 8               | 3.2  |
| 9               | 3.3  |
| 10              | 0    |
| 11              | 6.1  |
| 12              | 6.2  |
| 13              | 12.1 |
| 14              | 6.2  |
| 15              | 6.2  |
| 16              | 6.2  |
| 17              | 6.2  |
| 18              | 6.2  |
| 19              | 0    |
| 20              | 0    |
| 21              | 0    |
| 22              | 0    |
| 23              | 2.9  |
| 24              | 3    |
| 25              | 0    |
| 26              | 0    |
| 27              | 0    |
| 28              | 0    |
| 29              | 2.7  |
| 30              | 0.9  |
| 31              | 1    |
| 32              | 0.7  |
| 33              | 3    |
| 34              | 0    |
| 35              | 0    |
| 36              | 2.6  |
| 37              | 0.5  |
| 38              | 2.3  |
| 39              | 0    |
| 40              | 3.3  |
| 41              | 0    |
| 42              | 0    |
| 43              | 1.5  |

| MODE<br>PIN NO. | EE   |
|-----------------|------|
| 44              | 1.6  |
| 45              | 1.4  |
| 46              | 0    |
| 47              | 0    |
| 48              | 2.3  |
| 49              | 0    |
| 50              | 3    |
| 51              | 0    |
| 52              | 3.3  |
| 53              | 0    |
| 54              | 0    |
| 55              | 0    |
| 56              | 2.5  |
| 57              | 0    |
| 58              | 2.6  |
| 59              | 0    |
| 60              | 2.3  |
| 61              | 2.6  |
| 62              | 2.6  |
| 63              | 2.6  |
| 64              | 3.7  |
| IC7603          |      |
| 1               | 0    |
| 2               | 3    |
| 3               | 0    |
| 4               | 3    |
| 5               | 3    |
| 6               | 3    |
| 7               | 0    |
| 8               | 3    |
| IC7604          |      |
| 1               |      |
| 2               | 6.2  |
| 3               | 6.2  |
| 4               | 6.2  |
| 5               | 6.2  |
| 6               | 0    |
| 7               | 0    |
| 8               | 0    |
| 9               | 0    |
| 10              | 0    |
| 11              | 0    |
| 12              | 6.2  |
| 13              | 5.9  |
| 14              | 6.2  |
| 15              | 6.2  |
| 16              | 12.1 |
| IC7605          |      |
| 1               | 0    |
| 2               | 0    |
| 3               | -4.9 |
| 4               | 0    |
| 5               | 0    |
| 6               | 4.5  |
| 7               | 0    |
| 8               | 12.1 |
| Q7501           |      |
| E               | 0    |
| C               | 4.6  |
| B               | 0    |
| Q7502           |      |
| E               | 0    |
| C               | 4.6  |
| B               | 0    |
| Q7503           |      |
| E               | 4.7  |
| C               | 4.7  |
| B               | 0    |
| Q7504           |      |
| E               | 0    |
| C               | 0    |
| B               | 0.6  |
| Q7505           |      |
| E               | 0    |
| C               | 0    |
| B               | 0    |

| MODE<br>PIN NO. | EE    |
|-----------------|-------|
| Q7506           |       |
| E               | 0     |
| C               | 0     |
| B               | 0     |
| Q7601           |       |
| E               | 1.5   |
| C               | 4.5   |
| B               | 2.2   |
| Q7602           |       |
| E               | 0     |
| C               | 0     |
| B               | 3     |
| Q7603           |       |
| E               | 4.5   |
| C               | 4.5   |
| B               | 0     |
| Q7604           |       |
| E               | 4.5   |
| C               | 2.3   |
| B               | 4.5   |
| Q7605           |       |
| E               | 4.5   |
| C               | 0     |
| B               | 4.5   |
| Q7606           |       |
| E               | 4.5   |
| C               | 2.3   |
| B               | 4.4   |
| Q7607           |       |
| E               | 0     |
| C               | 12.1  |
| B               | 0     |
| Q7608           |       |
| E               | 0.8   |
| C               | -15.3 |
| B               | 0     |
| Q7609           |       |
| E               | 0     |
| C               | 10.4  |
| B               | 0.8   |
| Q7610           |       |
| E               | 0     |
| C               | -14   |
| B               | 0     |
| Q7615           |       |
| E               | 3     |
| C               | 3     |
| B               | 0     |
| Q7616           |       |
| E               | 3     |
| C               | 0     |
| B               | 0     |
| Q7617           |       |
| E               | 0     |
| C               | 4.5   |
| B               | 0     |
| Q7618           |       |
| E               | 0     |
| C               | 0     |
| B               | 3     |

## &lt;B/W VF&gt;

| MODE<br>PIN NO. | EE |
|-----------------|----|
| IC7001          |    |
| 1               | -  |
| 2               | -  |
| 3               | -  |
| 4               | -  |
| 5               | -  |
| 6               | -  |
| 7               | -  |
| 8               | -  |
| 9               | -  |
| 10              | -  |
| 11              | -  |
| 12              | -  |
| 13              | -  |
| 14              | -  |
| 15              | -  |
| 16              | -  |
| 17              | -  |
| 18              | -  |
| 19              | -  |
| 20              | -  |
| 21              | -  |
| 22              | -  |
| 23              | -  |
| 24              | -  |
| 25              | -  |
| 26              | -  |
| 27              | -  |
| 28              | -  |
| 29              | -  |
| 30              | -  |
| 31              | -  |
| 32              | -  |
| 33              | -  |
| 34              | -  |
| 35              | -  |
| 36              | -  |
| 37              | -  |
| 38              | -  |
| 39              | -  |
| 40              | -  |
| 41              | -  |
| 42              | -  |
| 43              | -  |
| 44              | -  |
| 45              | -  |
| 46              | -  |
| 47              | -  |
| 48              | -  |
| IC7002          |    |
| 1               | -  |
| 2               | -  |
| 3               | -  |
| 4               | -  |
| 5               | -  |
| 6               | -  |
| Q7001           |    |
| E               | -  |
| C               | -  |
| B               | -  |